

The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1527.—Vol. XXXIV.

LONDON, SATURDAY, NOVEMBER 26, 1864.

(STAMPED.....SIXPENCE.
UNSTAMPED.....FIVEPENCE)

MR. JAMES CROFTS, SHAREBROKER, No. 1, FINCH LANE, CORNHILL.

(Established 22 years.)
Mr. Crofts transacts business, in the way of PURCHASE or SALE, in every description of stocks, but particularly in BRITISH MINES, in no case departing from the position of a broker, at net prices.

Holders of mining shares DIFFICULT OF SALE in the OPEN MARKET may find purchasers by negotiation, through Mr. Crofts' agency. Also, parties requiring ADVICE how to act as to the DISPOSAL, or ABANDONMENT, of doubtful mining stocks may profitably avail of Mr. Crofts' long experience on the market in all cases of doubt or difficulty.

* ORDERS to buy or sell RAILWAY and BANK shares promptly carried out, for cash.

FOR SALE:—12 Crane, £4 17s. 6d.; 30 New Birch Tor and Viller, £23½; 25 South Darren, 33s.; 100 Wheel Hartley, 2s. 6d.; 200 Prince of Wales, 2s. 9d.; 10 Minera Union, £16; 4 East Basset (paying 24 per cent. dividends), £23½; all net, and calls paid. AT LOWEST MARKET PRICES:—50 North Chiverton, 25 Frank Mills, 10 Great Laxey, 60 East Wheel Vor, 20 Wheel Chiverton, 10 East Lovell.

MR. JAMES LANE, No. 44, THREADNEEDLE STREET, LONDON, E.C.

JAMES LANE has FOR SALE at net prices:—5 Basset and Grylls, £2; 3 Buller, £14½; 50 Bedol-Aur, 10s.; 20 Boscawen, 10s.; 30 Bryntall, £2; 3 Basset, £20; 60 Crebhor, 2s. 6d.; 50 Calstock Consols, 8s.; 20 Carn Camborne, £2; 10 Central Miners, 35s.; 50 Drake Wallis, 17s. 6d.; 20 East Lovell, £15½; 20 East Rosewarne, £2; 20 East Russell, £1½; 40 East Seton, 3s.; 10 East Chiverton, 30s.; 50 Furze Hill Wood, 3s. 9d.; 25 Great Wheel Bony, £24½; Hallenbeagle; 25 Haven (£5 paid), 25s.; 20 Lady Bertha, 15s. 6d.; 20 North Trekerby, £23½; 4 North Basset, 26s.; 10 North Grumbler, £24½; 60 North Devon; 50 New Wheel Martha, 27s. 6d.; 50 South Grenville, 9s.; 10 Wheel Kitty (St. Agnes), £25½; 50 Wheel Lodocott, 7s. 6d.

MR. WILLIAM LEALAN BUYS and SELLS all descriptions of ENGLISH and FOREIGN STOCKS and SHARES, INSPECTS MINES, and TRANSACTS all the usual BUSINESS of a STOCK and SHAREDEALER. Parties may rely upon him for sound advice and punctuality in all his engagements.

Mr. LEALAN has FOR SALE:—15 Great Laxey, 5 Providence, 20 Bedford United, 3 Clifford Amalgamated, 5 East Caradon, 5 East Wheel Lovell, 1 South Caradon, 1 St. Ives Consols, 5 Wheel Seton, 2 West Wheel Seton, 20 North Trekerby, 10 East Wheel Grenville, 20 North Chiverton, 10 South Wheel Easton, 100 South Condurrow, 20 Pendon Consols, 100 Prince of Wales, 2 Leewood, 10 South Darren, 75 West Wheel Jane, 20 East Rosewarne, 10 North Croft, 15 East Russell, 50 East Laxey, 50 Great South Chiverton, 75 Bedol-Aur, 10 East Trekerby, 10 Trelyn Consols, 30 Rosewarne Consols, 60 North Great Work, 70 Wheel Emma, 25 Trimley Hall, 100 Vale of Towry, 100 Hawkmoor, 20 Crane, 100 Wheel Curtis, 15 East Carn Brea, 200 North Jane, 100 Great Laxey, 20 Siltney and Carmichael, 20 East Chiverton, 5 Darren, 25 East Providence, £24½; and 250 North Miners, 3s.

I refer my correspondents to my letter in this day's Journal, page 824.
Bankers: Messrs. Roberts, Lubbock, and Co.
Office, 11, Royal Exchange, London, E.C.

WILLIAM WARD, 29, THREADNEEDLE STREET, LONDON, E.C.

JOHN RISLEY, 32, LOMBARD STREET, LONDON, E.C.
SHARES IN MINES BOUGHT and SOLD on commission, at 1¼ per cent., for immediate cash. Bankers: London and Westminster, Lothbury.

MESSRS. WARD AND JACKMAN, SHAREBROKERS, 2, ADAM'S COURT, OLD BROAD STREET AND MINING EXCHANGE, LONDON, E.C.

Bankers: London and Westminster, Lothbury.

FOR SALE, EACH NET:—
20 Frank Mills, 20 Long Rake, 37s. 6d. 25 North Downs, 15s.
50 East Vor, 1 St. Ives, £20. 20 Grenville.
3 Buller, £12½. 5 West Caradon, £26½. 6 East Agar, £24½.
Apply to Mr. J. W. HUTCHINSON, 78, Old Broad-street, London (Member of the Mining Exchange).

MR. T. ROSEWARNE, 81, OLD BROAD STREET, LONDON, E.C., has FOR SALE:

Bedol United, £24½. East Jane, £1 5s. North Robert, 9d.
Buller, £12½. East Vor, £1 17s. Prince of Wales, 4s.
Clifford Amalg., £34½. Furze Hill Wood, 6s. West Maria, £23½.
Chiverton, £26½. Great East Lovell, £23½. West Chiverton, £61½.
Cook's Kitchen, £12. Gawton, 10s. West Seton, £210.
East Russell, £4 18s. 9d. Great Vor, £34½. West Vor, 25s.
East Caradon, £18½. Great Laxey, £19. West Caradon, £7½.
East Lovell, £15½. Hallenbeagle, £23½. Wheel Uny, £27½.
East Carn Brea, £26½. Hingston, £44½. Wheel Grenville, £25½.
East Basset, £55. Kelly Bray, 12s. 6d. Wheel Crebhor, 38s.
East Grenville, £55. Lady Bertha, 10s. West Seton, £202½.
East Gunns Lake, 1s. 6d. Nanglies, £21½. Wheel Rose, £35.

And is a BUYER of:—
East Lovell, £14½. East Grenville, £55½. Kelly Bray, 11s.
East Carn Brea, £26½. East Basset, £51. Wheel Edward, 7s. 6d.
T. ROSEWARNE from his long experience in the mining market should be consulted respecting the leading mines in Devon and Cornwall.
Money advanced on mining shares.
November 25, 1864. Bankers: Bank of London.

WILLIAM BARTLETT, MINING SHAREDEALER, No. 2, BUCKLEBURY, LONDON, E.C.

(Member of the Mining Exchange.)
SPECIAL BUSINESS IN:—
Great Laxey. East Basset. North Trekerby.
Wheel Seton. Wheel Grenville. West Chiverton.
Providence. East Providence. Nanglies.
East Caradon. Great Fortune. Wheel Treawny.
Wheel Mary Ann. North Basset. Tincroft.
Clifford Amalgamated. Clifford Amalgamated. East Lovell, &c., &c.
Clifford Amalgamated, North Trekerby, Nanglies, Great Laxey, Tincroft, Wheel Treawny, and Great Fortune are worth buying, and should be secured at the present prices.
Bankers: Alliance Bank, Lothbury.

JOHN B. REYNOLDS, STOCK AND SHAREBROKER, 2, HATTON COURT, THREADNEEDLE STREET, LONDON, E.C., executes orders promptly. SPECIAL BUSINESS IN East Lovell.

"I never get anything by mining transactions, and therefore I decline making any further purchases." Such is the answer received very often by brokers who, in periods of depression, like the present, urge their clients to invest in mines. There are those, however, who eagerly seize an opportunity like this to make a careful selection, and buy as largely as their means will justify them in doing, and such are the parties who make money in these securities without difficulty. Seasons of inactivity are, of course, followed by a reaction, and when this sets in the prudent speculator is in a position to realise advantageously, whilst the unfortunate one, "who never gets anything by mining transactions," is without stock, having sold at the lowest quotations.

There are some mines of capital standing that are making very considerable returns, but have suffered severely from the terrible depression in the metal market, and which will most assuredly have a remarkable rebound when metals advance in price, or a good discovery takes place in the properties. To such investments I would call the immediate attention of capitalists, not excepting those who are averse to speculation, believing, as I do, if ever there was a time when money could be put in certain mines without risk it is now. I am not amongst the number of those who think that good times are far in the distance, for there are already symptoms of coming prosperity. Quietly—very—good shares being bought and stored away. Judicious business men are already in the field. By taking care of themselves they are helping to turn the tide, and who does not wish them every success?

During the many years I have been connected with the Mining Exchange I have kept a list of mines which I have considered good for investment and speculation, and I endeavour to recollect that the interest of the broker is thoroughly bound up in that of his client. When the agent is successful in his selection he reaps a benefit with his customer, and vice versa. Bearing this in mind, it behoves the broker to be very cautious; but it is a duty equally binding on the investor to satisfy himself, so far as possible, as to the soundness of his broker's views, and if a good understanding exists between the employer and employed success may be fairly anticipated.

Let all concerned in mining remember, for their encouragement, that one successful hit amply makes up for very many disappointments, and that losses are very often incurred through want of proper forethought. In the coming seasons of prosperity it is to be hoped that, whilst wild speculators will be avoided, the attention of large capitalists will be drawn to this wide, and ever-widening, field of industry, which offers so many advantages.—November 25, 1864.

MR. GEORGE BUDGE, SHAREDEALER, No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 17 years), has FOR SALE at net prices:—20 East Grenville; 20 Marke Valley; 40 Siltney Metal, 35s.; 20 Hlogan, 15s.; 10 Tincroft; 3 Herodfoot; 100 Welsh Gold, 18s. 6d.; 2 West Sharp Tor; 50 Oak Tor, £205; 50 East Rosewarne; 1 South Caradon; 150 Anglo-Brazilian, 6s. 6d.; 2 Miners, £205; 150 Wheel Pollard, 1s. 6d.; 100 Santa Barbara; 20 East Granville and St. Aubyn, 13s. 9d.; 25 Gonaimes; 100 Frontino and Bolivia; 20 North Trekerby; 130 Merilyn, 2s. 6d.; 50 East Russell; 120 St. Day United; 2 West Damsel; 50 Wheel Hartley, 10s.; 2 Wheel Seton; 200 Bottle Hill, 1s. 6d.; 20 Hallenbeagle; 150 West Phillip; 30 East Chiverton; 15 Camborne Yean; 1 West Tolgas; 60 Wh. Crebhor.

STOCK AND SHAREDEALER.—MR. PETER WATSON, ENGLISH AND FOREIGN STOCK, SHARE, AND MINING OFFICES, 79, OLD BROAD-STREET, LONDON, E.C.

Twenty years' experience.
(Two in Cornwall and Eighteen in London.)
Bankers: The Union Bank of London, and the Alliance Bank.

Every information can be obtained on personal application, or by letter, as to purchases and sales of Mine, Railway, Bank, and other Shares and Stocks, and the best investment for capital.
From the close proximity of his offices to the Stock Exchange, as well as the Mining Exchange, PETER WATSON is enabled to act with promptitude on all orders entrusted to him, which at all times are carried out with punctuality.

INVESTMENT FOR CAPITAL.—For a good investment and a great rise in the present price of shares, Mr. PETER WATSON is prepared to recommend four mines, which are paying good dividends (every two months or quarterly), and eight progressive mines, requiring but a further small outlay, which, from the present position and future excellent prospects, he feels confident in recommending at the present greatly depressed prices. The above selection of twelve mines present more than the usual chances of success during the next twelve months. This list will be sent on application to all those who desire it, with the respectful solicitation that investors do their business through PETER WATSON, 79, Old Broad-street, London, E.C.

EAST WHEEL LOVELL.—In my "Weekly Circular," No. 343, of Oct. 7, I stated—"I should recommend my friends to increase their holding at present prices, 8¼ to 8½; and in my "Circular," No. 344, of Oct. 14 (four weeks ago) I stated—"The shares this week have been firm at 8¼ to 8½, and will, in my opinion, advance considerably," and this week they have advanced to 14½ to 15½. Those who acted upon my advice can now realise a great profit if they so desire.

PETER WATSON'S WEEKLY MINING CIRCULAR AND SHARE LIST, published every Friday, price 6d. each copy, forwarded on application. This Circular contains weekly important information with respect to all the principal Dividend and Progressive Mines in Devon and Cornwall.
79, Old Broad-street, London, E.C.

CAPITALISTS AND SHAREHOLDERS IN MINES

will do well to read the "Weekly Circular," published by PETER WATSON, of Friday, November 4, Vol. VII., price 6d. each copy.

In this Circular there are several mines mentioned which are certain to pay good interest, or otherwise greatly advance in market value.

79, Old Broad-street, London, E.C.

JAMES HERRON has FOR SALE the following SHARES, at

the prices quoted, and FREE OF COMMISSION:—
5 Anglo-Mexican Mint. 40 Great Retallack, 2s.
15 Bedford United, £2 13 9. 61. Wh. Vor, £33 16 3
30 Bedol-Aur. 5 Great Fortune, £29.
20 Bottle Hill, 2s. 12 Great Laxey, £25.
30 Bryn Gwlog. 50 Gt. South Chiverton. 25 Siltney Metal.
20 Bryntall, £23½. 10 Great Wheel Metal (an offer wanted).
3 Buller. 2 St. John del Rey.
10 Boscawen. 40 St. David's Gold, 6d.
10 Canadnock, 18s. 6d. 1 South Tolgas.
40 Caradon Hill. 10 St. Ives Wheel Allen.
5 Clifford Amalg., £33 8 9. 20 St. Day United, 25s. 9d.
1 Cargoll, £38. 50 Gt. South Chiverton. 5 Tincroft, £18½.
20 Carn Camborne, 25s. 9d. 10 North Shepherds.
10 Chiverton Moor, £23½. 2 St. John del Rey.
5 Chiverton, £2 7s. 6d. 40 St. David's Gold, 6d.
40 Crever Abraham. 50 North Wh. Croft, £23.
20 Camborne Yean, £2 1s. 50 North Devon.
10 Clifrah & Went, £23½. 20 North Downs, 13s. 9d.
50 Dale. 15 North Trekerby, £2 7 6
20 Drake Wallis, 15s. 50 North Miners, 3s.
1 East Basset, £53½. 30 New Martha, 25s.
10 East Carn Brea, £20½. 10 North Rosecar, £17½.
15 East Seton. 50 North Shepherds. 10 North Trekerby, £2 7 6
1 East Russell, £4 18s. 9d. 10 New Wheel Lovell.
5 East Lovell, £14½. 20 North Robert, 2s.
10 East Chiverton, 20s. 20 Rosewarne United.
15 East Margaret. 1 New Seton, £60.
20 E. Rosewarne, £23½. 60 North Chiverton, £24½.
10 East Grenville, £54½. 2 Nanglies, £20 8s. 9d.
5 East Laxey. 5 New Rosewarne.
5 East Caradon, £18 16 3. 50 Port Phillip.
10 East Vor, £34½. 50 Prince of Wales, 2s. 6d.
25 Great Laxey. 1 Providence, £26½.
20 Garidona. 20 Quebrada (£5 10s. paid).
20 Hingston Wheel Gill. 5 Rosekarnworth.
20 Great St. Tolgas, 3s. 6d. 50 Redmoor.
50 Gt. Northern Copper, 1s. 50 South Carn Brea.
(call paid). 20 South Grenville, 5s. 9d.

Mr. HERRON continues to recommend Clifford Amalgamated, Quebrada, West Sharp Tor, Hingston Down, Cwn Erlyn, West Caradon, and Rosewarne United.
2, Adam's-court, Old Broad-street, November 25, 1864.

MESSRS. VIVIAN AND REYNOLDS, 37, OLD BROAD STREET, LONDON, E.C., MINING ENGINEERS, INSPECTORS OF MINES, COMMISSION, and GENERAL AGENTS for the PURCHASE or SALE of MINES, SHARES, RAILWAY, and EVERY OTHER DESCRIPTION OF STOCK.
Commission on share transactions 1¼ per cent. on £100 and above, and 2¼ per cent. on less sums.

MR. EDWARD COOKE, MINING SHAREBROKER, 2, CROWN CHAMBERS, THREADNEEDLE STREET, LONDON, E.C.

(Member of the Mining Exchange.)
Mr. EDWARD COOKE has removed to the above address, where all communications on matters relating to business will meet with his usual attention.
Nov. 25, 1864. Bankers: Alliance Bank, Lothbury.

MR. GEORGE BATTERS strongly recommends his friends to buy West Chiverton, Chiverton, Herodfoot, South Caradon, Devon Great Consols, Great Wheel Vor, Prosper United, Wentworth Consols, and Siltney Wheel Metal for investment. These shares will pay good interest for money at present quotations.
76, Old Broad-street, London, E.C.

WILLIAM SEWARD, MINING BROKER, STOCK AND SHAREDEALER, 19, THROMGORTON STREET, LONDON, E.C.

Commission, 1¼ per cent. on all transactions.

SHARES WANTED IN THE FOLLOWING MINES,

most of which are at the same time strongly recommended for an early and immense rise in value:—
South Condurrow. Wheel Margaret. East Lovell.
Bryntall. Wheel Jane. Tincroft.
Clifford Amalgamated. Camborne Yean. Rosewarne United.
Carn Camborne. Kitty (Leland). West Caradon.
New Rosewarne. South Basset. Gambier and St. Aubyn.
Great Fortune. East Grumbler. East Wheel Russell.
Tolvaide. Tolvaide.

Friends and investors, if they would consult their own interests, will do well to act upon this advertisement, and not treat it as one of the empty statements so often put forth in the public journals.
Mining Offices, 77, Old Broad-street, London, and Mining Exchange, Nov. 25, 1864.

GEORGE RICE, SHAREBROKER, 5, COWPER'S COURT, BIRCHIN LANE, LONDON (22 years' experience), Member of the Mining Exchange, has SPECIAL BUSINESS, as BUYER or SELLER, in the following:—

Closing quotations. Closing quotations.
Clifford Amalgamated £39½-40 North Shepherds 19-20
Chiverton 6½-7 Nanglies 19-20
East Russell 4½-4¾ Marke Valley 4½-4¾
East Carn Brea 6½-6¾ North Trekerby 2½-2¾
East Caradon 18½-19 Wheel Crebhor 36s.-37s.
East Wheel Lovell 14½-14¾ Wheel Grenville 5½-5¾
E. Wh. Grenville (call pd). 5½-5¾ West Chiverton 60-65
Great Wheel Vor 33½-34

EAST LOVELL.—Geo. Rice is in possession of most important information affecting the prospects of this mine, and should be consulted by shareholders and speculators immediately.
Enormous profits may be made by operating in the right direction, but this must be done at once.
Money advanced on mining shares.
Nov. 25, 1864. Bankers: Bank of London.

JAMES HUME, SHAREBROKER, 74, OLD BROAD STREET, AND MINING EXCHANGE, LONDON, E.C., is a BUYER of East Grenville, £8½; North Shepherds, £4; West Tolgas, £25; Union, 15s.; South Condurrow, 29s.; East Lovell, £16.
J. Hume's "Circular" for November will be sent on receipt of six stamps. As these are the best times to make a careful selection of shares, Mr. Hume recommends those who wish to consult him to do so before the markets resume their wonted buoyancy.
Commission, 1¼ per cent.
Bankers: London Joint-Stock Bank.

MR. T. P. THOMAS, GENERAL SHAREBROKER, AND AUCTIONEER FOR THE SALE OF MINING, RAILWAY, AND OTHER SHARES, STOCKS, BONDS, DEBENTURES, And all descriptions of Public Securities.

No. 6, NEW BROAD STREET, LONDON, E.C.
Shares bought and sold on the usual commission.
Terms for sale of shares by auction furnished on application.

MR. T. P. THOMAS having had the FOLLOWING SHARES

for sale at his last auction, without reserve, and for which he had no bidding, will be happy to receive orders for all, or any part, the same being now FOR SALE:—
250 Wheel Unity. 80 Garidona United. 35 Wheel Pollard.
20 Wheel Henric. 50 Croser Valley and Port. 36 Caradon Hill.
50 Great Caradon. Madoc Slate Com- 700 Great Northern of Aus-
60 North Pool. pany (£2 paid). tralia (Copper).
38 Rosekarnworth.

IMPORTANT SALE OF VALUABLE MINING SHARES.

300 shares in the Haven Silver-Lead Mines, Cardiganshire (£5 fully paid-up).
750 shares in the Silver Mountain Lead Mine, Cardiganshire (£2 paid-up).
250 shares in the Cwmymlog Lead Mine, Cardiganshire (£5 fully paid-up).
220 East Wheel Providence Mine, Cornwall.
50 Wheel Grylla Tin Mine, Cornwall.
250 Hlogan Consols, Cornwall.
45 East Gunns Lake shares (forfeited for non-payment of calls).
And sundry other shares not sold at my last sale, particulars of which will appear in the next Journal.

MR. T. P. THOMAS has received instructions to SELL the

ABOVE SHARES, BY PUBLIC AUCTION, at Garraway's Coffee-house, Change-alley, Cornhill, London, on Thursday, the 8th day of December, at One o'clock.
For further particulars as to Haven, Silver Mountain, and Cwmymlog application may be made to Messrs. GUERIN and DELL, 1a, Adelphi-terrace, Adam-street, Strand; as to East Gunns Lake, to the secretary, Mr. Laws, 50, Threadneedle-street; and for catalogues to Garraway's, the MINING JOURNAL office, and the auctioneer's offices, 6, Old Broad-street, London.

MR. T. E. W. THOMAS, MINING AGENT AND GENERAL MINING SHAREDEALER, 37, OLD BROAD STREET, LONDON, E.C.

MR. FRANCIS G. LANE, No. 2, ROYAL EXCHANGE, LONDON, E.C., has the following SHARES FOR SALE, free of commission:—

20 East Caradon, £19½. 20 East Russell, £5 1s. 3d. 50 Wheel Pollard, 6d.
10 Great Laxey, £19½. 50 Glasgow Cara., £3 5s. 60 Caradon Hill, 6d.
50 Wheel Hartley, 7s. 50 West Maria and Fortes- 5 Prosper (Brea), 25s.
50 Prince of Wales, 2s. 10d. cue, £2 15s. 10 East Lovell, £14 17s. 6d.
60 Frontino and Bolivia, 25 New Wh. Martha, 26s. 20 South Darren, 30s.
17s. 6d. 50 Wheel Lodocott, 10s. 50 Drake Wallis, 16s.
25 St. Just United, 35s. 60 East Jane, 15s. 35 Wheel Crebhor, 37s. 6d.
5 Clifford, £24 2s. 6d. 25 G. E. Lovell, £2 10s. 6d. 40 Vale of Towry, 4s. 6d.

BUYER of Marke Valley, £4 12s. 6d.; Nanglies, £20; and South Croft, £10½.
Business done for the fortnightly account.

Special business in Torbay Hematite Iron (Limited).
Parties of respectability can have transfers registered into their names previous to payment.
Bankers: London and County Bank.

WANTED, CARN CAMBORNE SHARES.—

State number and lowest price to "H. H. P." Post-office, Winchester.

HENRY GOULD SHARP, STOCK AND SHAREDEALER, 32, POULTRY, LONDON, E.C.,

Member of the Mining Exchange (established 12 years).
Is in a position to give SOUND ADVICE and RELIABLE INFORMATION as to the SAFEST and BEST PAYING INVESTMENTS of the day, both in RAILWAY, BANKING, MINING, INSURANCE, DOCK, GAS, FINANCIAL and OTHER SHARES.

SAFETY INVESTMENTS FOR CAPITAL.
The following DIVIDEND and PROGRESSIVE MINES are perfectly safe for the investment of capital:—

CLIFFORD AMALGAMATED (COPPER).—In 2900 shares, £20 paid, price £35 per share. These shares continue very firm; it is difficult to find a seller at the advanced price. The mines are looking splendid. Their sales of copper ore are enormous, over 1300 tons bi-monthly. Upwards of £1,100,000 has already been paid in dividends. They pay £3 annually, which will increase, being 8½ per cent. upon the present price. The lodes of these celebrated mines pass into Nanglies.

EAST CARADON (COPPER).—In 6144 shares, £2 14s. 6d. paid, price £19 10s. per share. These shares have dropped from £25, at which price they were much too high. They are now worth buying. The last quarterly dividend was 15s. per share, being 17 per cent. upon present price. £74,342 has been paid in dividends the past three years.

EAST BASKET (COPPER).—In 512 shares, £29 10s. paid, price £24 per share. An improvement would cause a considerable rise in price. £29,376 has been paid in dividends. The present rate of dividends is £12 annually, being 22½ per cent. upon the market price.

GREAT WHEEL LAXEY (LEAD).—In 12,500 shares, £4 paid, price £18 per share. This mine has greatly improved, and likely to continue a lasting dividend-paying property. Shares have advanced from £14 to present price since January last. Dividends are payable quarterly, 10s. per share (this will gradually increase), being 11 per cent. upon present price. This property now commands a market value of £225,000.

PROVIDENCE (TIN).—In 1120 shares, £10 6s. 7d. paid, price £38 per share. This mine has given £32,040 in dividends. They pay £1 per share quarterly, which is 10½ per cent. on present price of shares. The mine is looking well. A rise in tin would put shares to £45 again, and increase their profits.

WEST WHEEL SETON (COPPER).—In 400 shares, £47 10s. per share, price £205 per share. These shares pay £4 every two months, which is 11½ per cent. on present outlay. £163,600 has been given in dividends. They are a good investment, and certain to rise in price.

WHEEL LAXEY (LEAD).—In 1040 shares, £5 17s. paid, price £30 10s. per share. This mine has given in dividends £32,360. They pay 12s. 6d. per share quarterly, being about 12 per cent. on present price.

WHEEL SETON (TIN AND COPPER).—In 397 shares, £58 10s. paid, price £200. This mine is looking well, and holds out prospects of great improvement. Dividends are paid every two months £4 per share, or £24 annually, being 12 per cent. upon present outlay. They are a safe investment, and will rise in price. £73,765 has been paid in profits.

NANGLIES (TIN AND COPPER).—In 1024 shares, £19 paid, price £23 per share. There are no shares offering. The mine continues to look well. The ore is coming in the 107 east, an important feature. The 107 west is still looking very favourable. The mine below the 96 is still improving; lode worth £30 per ton, and leaving a rich lode in both ends of the winze. The west end of winze is better than the east end, showing an improvement in the lode westward, and a lengthening of the ore ground in going down. Shares are on the rise, and must go better. The "bears" are at work again, selling shares, and borrowing afterwards to enable them to deliver. I trust shareholders will not be frightened out of their shares by false reports, but hold on for a permanent investment. Lasting dividends will be the result, and shares will go to £100 each. The shares are better worth £36 now than when selling at that price a few months since. I strongly advise their immediate purchase.

EAST WHEEL VON (TIN).—In 6000 shares, £5 paid, price £1 17s. 6d. per share. There is an improvement here. A large number of shares have been bought up for investment. They are cheap shares at £1½, with £4000 in hand for working expenses. They were saleable at £5 a few months since, and there is no just cause for the fall in price. The mine adjoins and has Great Wheel Vor lodes.

The following are also well worth buying at present quotations:—East Providence, East Carn Brea, Wheel Uny, Lady Bertha, Wheel Agar, North Basset, Wheel Ida, Wh. Margery, Wheel Margaret, West Caradon, East Chiverton, South Condurrow, Pendon Consols, North Croft, Great South Tolgas, St. Day United, Cook's Kitchen, &c.

Bankers: London and Westminster, Lothbury, London, E.C.

HARRIS AND CO., STOCK AND SHAREBROKERS, AND FINANCIAL AGENTS, 15, GEORGE STREET, MANSION HOUSE, LONDON, E.C.

HARRIS and Co. having made special arrangements for transacting every kind of business in the Stock and Shares of Mines, Ironworks, and other Industrial Companies, are prepared to effect, at the closest prices, purchases or sales of such stock on commission. As they transact a purely commission business, they are prepared, in every case, to give the names of principals.

In transacting their business HARRIS and Co. beg to state that they make it a rule not to be themselves connected with any concern as promoters, or placers of stock; they endeavour to make themselves acquainted with every available information on the intrinsic merits of all stocks, but avoid identifying themselves with any particular undertaking.

With respect to stock in mines and ironworks, HARRIS and Co. have made arrangements to secure the very best and earliest information that can be had from the seats of operation. In the metallic mining districts of Cornwall and Devon, Wales, Shropshire, and the Isle of Man, of the Midland Counties, of Yorkshire and the Northern Counties, and of Ireland, they have agents and correspondents among the best-informed persons. They have also full and special information of all facts affecting the interests of every company connected with the Coal and Iron districts.

HARRIS and Co. have correspondents in New York, Boston (U.S.), Halifax (Nova Scotia), Philadelphia, San Francisco, Melbourne, and Adelaide, by which they are in a position to buy and sell American and Australian stocks for European buyers, or European stocks for American or Australian buyers, on unusually advantageous terms.

HARRIS and Co. issue a circular to their clients on the first and third Wednesday in each month, which, for the convenience of their foreign and colonial correspondents and customers, is registered at the Post Office for transmission abroad.

Original Correspondence.

CORNISH MINING—THE ROYAL COMMISSION.

Sir,—It is always a difficult undertaking to induce a commercial man to expend capital, interest for which is not immediately and directly forthcoming. On this ground, and on this alone, can we account for the indifference with which mine adventurers always view the question of the health of the miners in their employ. Even, however, commercial men, we trust, are amenable to statistical conclusions such as are laid before them in the Report of the Royal Commissioners on Mines, lately published. There we see, indisputably, that the life of our Cornish miners is of shorter duration than that of any other portion of the community. Now, a large portion of our Cornish miners are real adventurers in the mine, not in way of holding shares, but as giving their time and labour in return for a certain percentage of all the ore they can extract. This mode of working the mines has been greatly on the increase of late years, and has induced the agents and adventurers to view the health of the miners with perfect indifference; and they argue that if there is ore in that part of the mine set to tribute the adventurers must get their share of it, whatever be the condition of the miners. This argument is a most erroneous one, for in no branch of mining is it more important that the labourer should come to his work with all his powers of body and mind unimpaired than in tribute mining. Fatigue and weariness, of necessity, induce carelessness, and in working on in an indifferent manner the miner may fail to discover that first minute string of ore, the leader, possibly, to a rich vein. Once passed, this string on the wall, possibly, of the level is soon obscured by the dirt and smoke, and lost to view, and the adventurers as well as the tributers are losers thereby. Such is not an imaginary case, but one of not uncommon occurrence. On this commercial ground, then, we say to the adventurer it is to your interest to keep your miners in good health, and to bring them to their work fresh and sound in mind and limb. Now, in very few instances can the miner arrive at his work fresh, for he is compelled to descend by ladders to a depth often below 200 fathoms; thus losing a considerable portion of his working time, and at last arriving at his destination hot and weary. Before commencing to work he is compelled to rest and cool himself, and so there is a still further loss of time; and after all his rest he cannot seize the pick and gad with the same vigour as if he had to perform the same duty at grass. His allotted period of labour having elapsed, he has to transfer himself from this great depth to the surface: exhausted by his work, the most tedious part of his day commences when he puts his foot on the ladder-stave to ascend, and he arrives at surface breathless and exhausted. This climbing by ladders is, we think, the most injurious part of the miner's existence; and we are convinced that it is most advantageous, in a pecuniary point of view, to provide some mechanical means for taking the miner down to, and bringing him up from, his work. Under this head we are much disappointed with the report of the Commissioners; and although it may be expected too much, considering how very little the members of the Commission could have known on the subject, yet we had hoped to find some sort of comparison drawn between the different mechanical contrivances for effecting this much-desired end—the carrying of the miners to and from their work. The only three contrivances, they tell us, are the man-engine, the skip, and the wagon on an inclined-plane; and in reading their report we can but conclude that they considered the skip not the least applicable contrivance for the purpose. Our opinion differs so widely from this, that we can but express our reasons for it.

The most important requisites in the machine we want are speed and safety. Of the first of these—speed—we may affirm that unless a skip be of such dimensions as are found in our collieries (a thing quite impossible in the small shafts of our Cornish mines), anyone can prove for himself that run a skip up and down the shaft at anything like a safe speed, a man-engine, making six strokes a minute, is capable of transferring by far the larger amount of men from surface to a given depth in the same time. Of the second desideratum in our machine—safety—we need only take the number of accidents in one of the mines where the skip is adopted, and compare them with the accidents where there is a man-engine, and the advantage of the latter will become immediately apparent. We cannot here help a smile at the evident terror (from the tone of their report) with which the Commissioners viewed the rising and falling pole of the man-engine; but, having continually travelled by both, we unhesitatingly affirm that on the man-engine we have always felt secure, and in the skip continually in terror. Besides our Cornish mine shafts, from their small size and varying underlie, are peculiarly inapplicable for the general adoption of the skip. And, further, for another reason we prefer the man-engine to the skip, and that is on account of its being a much cheaper contrivance in the long run. As first put up in our Cornish mines, and even as now modified, the man-engine is a costly machine; but what we would propose is a still cheaper modification, such as is adopted in the mines on the Continent, where, for the costly timber rods iron ones are substituted. Attention to some such cheaper form of the man-engine would well repay the Cornish engineers. In Germany these machines cost far less, taking into full account the difference in the value of labour and material here and there. As to the third method—that of a wagon on an inclined-plane—we need not say anything. The fearful accident in Botallack Mine must be still fresh in the memories of many, and we trust that no such machine will be ever again proposed and brought into use as that fearful “gig,” running on rails on an inclined-plane, by which the miners were taken down and brought out from that mine. One shudders as one remembers how short a time previous to that occasion, on which nine lives were lost by the snapping of the chain by which this “gig” was moved, we, with others, descended the very mine, and cannot help remembering how the miners chuckled at our expressions of doubt as to the security of that mode of travelling, and laid the same to our inexperience and cowardice. When we began to ascend, and were spasmodically drawn by jerks at a great rate for a few fathoms, and then let suddenly back a foot or two, and as suddenly jerked on again, the miners seemed to revel in the scene. To us it was nothing short of awful, and, though it has been our lot to descend mines in all parts of England and the Continent, we never on any one occasion hailed with such joy and thankfulness the change from underground to grass as we did on that day when we emerged from the hole in the Cornish cliffs.

I have used here strong language, but not too strong, I trust, for the occasion, for, if a voice can have any weight, I am convinced it cannot be used to better purpose than to condemn so untrustworthy a machine.

MINER.

THE SLATE TRADE IN NORTH WALES.

Sir,—In accordance with the promise in my former letter of noticing the other trials in the Llanllechid Mountain, I shall first notice the “Cefnyr-Osredd trial,” which, as stated in the Journal some months back, is situated about a mile to the north-east of the Penrhyn Quarry. This trial was commenced about fifteen months ago, but the works were not regularly carried on till about three months since, when the original proprietors came to terms with a Manchester man for thirteen shares, and the remaining three shares to be also worked for them, free of all costs. Since this arrangement the works have been pushed forward with all energy, and have also been inspected by one of the agents of the Penrhyn Quarry, and most favourably reported upon; and certainly, from all indications, when the present shaft is finished, and an opening made from this shaft, the present adventurer will be rewarded for his outlay by large returns of slates, which in quality, &c., are not surpassed by any in North Wales.

“The Afon Wen trial.”—This opening is situated about three miles, in an easterly direction, from Cefnyr-Osredd, and close to the river from which it derives its name. Operations were commenced here about nine months ago, and were vigorously and energetically carried on till about the commencement of this month, when, owing to the severity of the weather, and its great distance from Bethesda (five miles), the works have been suspended for the winter. This opening appears very encouraging, but as the proprietors, who are quarrymen, and without the requisite capital to develop such an undertaking, have fortunately come to terms, I am informed, with Mr. J. Francis, of the Penrhyn Quarry, this fact alone, if correct, speaks highly for this trial.

The last I shall at present notice (although there are as many as eight other trials) is the “Llidiart-y-Graian Quarry.” This is situated about one mile to the north of Cefnyr-Osredd, and probably on the same vein, and has two openings, but one of which at present has been abandoned. The other is in a forward state, and has already produced some excellent slates. It is most favourably situated to have a quarry on a grand scale, like the Penrhyn Quarry, for the hill rises here to a great height, so that as many as a dozen galleries could be easily formed; but the only great difficulty here, as in Pant-y-Daran, in case they are to prove valuable slate quarries (and which I have not the least doubt they will), is the construction of a road or tramway for the conveyance of slates, as the present roads are unpassable, except for sledges, which are used to carry down the peat.

In concluding, I beg to state that in a few years, when these trials will be developed, it is my firm conviction that their produce will form an important item in the slate returns of the new quarries in North Wales.

Beaumaris, Nov. 22.

E. A. W.

P.S.—Since writing the above I have been informed that a company has purchased the last-named trial, and that the works will, therefore, be extensively carried out early next year.

MINING IN IRELAND.

Sir,—A recent visit to Ireland has yielded me many opportunities for witnessing, with much pleasure, what must be a source of great gratification to the well-wishers of that charming country—I mean the improvement in some of the mining districts, particularly those in the county of Cork, through the impulse given to the development of its rich mineral resources by the irresistible influence of the large amounts of capital now being invested in the many valuable properties which abound in this locality. My attention was particularly drawn to the estate of the Ecclesiastical Commissioners, south of Schull. Capt. Alfred Poole, manager of the Schull Bay Copper Mine, has been engaged for some time by a company of influential capitalists in Liverpool, and has made a mineral survey of the whole property, which is now cleverly mapped, showing the several lodes, slate veins, free-stone veins, &c., and their direction, large deposits of manganese included.

A highly valuable slate quarry, on Lord Bandon's property, near Bantry, is now being worked by the above-named company, designated the “Rosmore Slate Company.” Already they have opened the back of a rich slate vein in the South Schull estate; they have also determined to commence operations on some of the lodes—indisputably rich in copper—passing through their sett. To the east the mines at Cappagh, Schull Bay, Ballycumisk, and some others, bear testimony to the productiveness of this district, although to the westward several trials have been made, with no very encouraging results. The copper mine at Schull Bay, which certainly presents indications of being a property likely to yield a rich return for a judicious application of capital, will, it is to be hoped for the sake of the numerous shareholders, soon resume active operations, as the manager has had much experience in England, Wales, Scotland, and on the Continent, and appears an intelligent and energetic man.

The manifestation of monied enterprise by producing employment for “the finest peasantry on God's earth,” as Dan O'Connell used to say, must very sensibly tend to check the wild exodus of the fine fellows—the bone and muscle of old Ireland—who, under the influence of one delusion or another, have been induced to quit their native soil; and I venture to think that, with the aid of the Journal, they will, ere long, be convinced (however prone to blunder, and rampant with the love of fighting) that there is much wisdom in preferring the jingle of metal (even humble copper) bearing the impress of Victoria, to the greenbacks and shin-plasters of fratricidal America.

SILEX.

BORING MACHINERY—ITS INVENTION.

Sir,—In Mr. Green's first communication to the Journal he laid claim to the invention of my Patent Boring Machine, although I had been three years engaged on it before I even ever saw him. In my answer I stated the facts—that he only made two machines by my permission, and on payment to me of a royalty on the same, and took the opportunity of giving the credit to those gentlemen to whom it was due for designing the pillar, stand, &c. In last week's Journal he again comes forward, and gives what he vaguely states as a description of his specification. I see he heads his letter No. 1, which, I presume, means the commencement of a series. Now, as I am beginning to reap the reward of near six years' labour, in the shape of several extensive orders, which fully occupy all my time and attention, when he has finished his lucubrations I shall be better able to give what notice to them they may deserve. I could say a good deal on No. 1, but will reserve it until he has finished. E. CREASE.

Tavistock, Nov. 23.

BORING MACHINERY—ITS INVENTION—No. II.

Sir,—It will now be necessary for me to state the point of perfection Messrs. Crease and Williams had attained when the patent excavating machine, so called, came under my notice, the joint production of the engineering capacities of those two gentlemen; and be it always remembered, as Mr. Williams informs your readers, that machine (not mine) no one living knew anything about the designing but themselves, and it was made after the fullest and most mature study and deliberation. Endless designs had been suggested, altered, and abandoned, and others substituted, during a period of two years. This fact would suggest that they had undertaken rather too much, and the sequel will prove what was the case. However, imagining that they had hit on the proper method to construct the machine, a contract was entered into with the Vigna and Clogau Mining Company to drive 300 fms., at the minimum rate of 1 fm. per day. This contract was taken, I believe, before the machine was even begun; at any rate, a great many months before it was completed. Without entering into details of the construction of this machine, I state that there was not a single limb of the machine or arrangement for its application, as it came from the head and hands of its originators, that answered the purpose intended; in fact, a more complete failure could not possibly have been made than the result of the trial of Messrs. Crease and Williams' excavating machine at the Vigna and Clogau Mine, which will be seen as under. The whole cost of the machine, including ventilation apparatus, fixing, &c., was nothing less than 1600*l.*; and, after some six months of preparation, and two months of working, about 2 fms. of ground were driven, at a cost for driving alone of 70*l.* per fm.; in addition to the above, a great many months before it was completed. 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Meetings of Public Companies.

EAST INDIA COAL COMPANY.

An extraordinary general meeting of shareholders was held at the offices of the company, Serjeants' Inn, on Monday.—Mr. J. WILDE in the chair.

The notice convening the meeting having been read, the report of the directors (which has already appeared in the Journal) was taken as read.

The CHAIRMAN said the board of directors were at length able to place before the proprietors the accounts for the past four years. During the first three of those years the company was not so successful, and especially in 1862, when there was a heavy loss, but that was from various causes. During last year, however, there was a profit of more than 2000*l.*, which, under the circumstances (there having been a bad fire, which caused a very considerable loss), was an encouraging fact; and, with additional capital, things would progress much more satisfactorily. They had had from their manager a clear and able report (which appeared in the Journal of Nov. 8), in which it was shown that with sufficient capital at their command there were no reasons why this company should not be at least second only to the Bengal Company. The chief object of the present meeting was to obtain the assent of the shareholders to the raising of additional capital. It was proposed that the capital should be increased by a sum not exceeding 20,000*l.*, in 2000 shares of 10*l.* each, to bear a preferential interest of 10 per cent. per annum. Owing to the present high rate of interest, the directors did not wish the shareholders to take a larger amount than 2000 shares, with 2*l.* paid up—that would put the directors in a position to enable them to borrow money upon debentures, if not now, any day, and in such case the holders thereof shall be entitled, in addition to the arrears of dividend (if due) thereon, to a bonus of 10 per cent. on the amount called up; that a deposit be paid of not less than 2*l.* per share, and that future calls shall not exceed 2*l.* 10*s.* per share, with an interval of not less than three months between each call. To be offered *pro rata* in the first instance to the shareholders.

The resolution was put and carried unanimously. A vote of thanks to the Chairman terminated the proceedings.

NORTH CHIVERTON MINING COMPANY.

A special meeting of shareholders was held at Mr. Edward Cooke's offices, Crown-court, Threadneedle-street, on Saturday.

Mr. EDWARD COOKE in the chair.

Mr. W. WATSON (the purser) having read the notice calling the meeting, the CHAIRMAN said the object of the present meeting was to appoint a secretary in the room of the late lamented Mr. Dunsford, whose death they all so deeply deplored. As he (the Chairman) had been identified for the promoters of this mine from its commencement, and the shareholders probably looked to him to see that the whole of its affairs were conducted properly and with efficiency, he felt it his duty in such an emergency as that to which he had just referred to take upon himself the responsible task of recommending to the shareholders a gentleman in whom they could place the utmost confidence as their future secretary. After due consideration, he had come to the conclusion that he would be consulting their best interests by recommending the appointment of Mr. J. H. MURCHISON, who had been known to him (the Chairman) for many years as a gentleman in every respect eminently qualified to fill the office. With those few remarks he would propose that Mr. J. H. MURCHISON be appointed secretary, in the room of Mr. Dunsford, deceased.

Mr. PEER had much pleasure in seconding the proposition, believing that Mr. Murchison would prove a very proper successor to Mr. Dunsford.

It was unanimously resolved—"That Mr. J. H. Murchison be and is hereby appointed secretary of this company;" and that he be and is hereby requested to make application to the representatives of the late Mr. W. J. Dunsford for all books, papers, deeds, &c., of North Chiverton Mine, and to give to them the necessary receipt for the same."

The CHAIRMAN said that in the circular convening the meeting reference was made to the appointment of a committee; but as at present a considerable proportion of the shares were held in the country it would, perhaps, be somewhat difficult to get a sufficient number of London shareholders to act upon the committee; at the same time, however, he should only be too glad for anyone to do so.

Mr. FERRIS WATSON suggested that the appointment of a committee should be deferred to the next general meeting, and proposed a resolution to that effect, which having been seconded by Mr. ASH, was put and carried unanimously.

The CHAIRMAN said he would take the present opportunity of placing before shareholders all the information he possessed relative to the mine; and, with that object in view, would in the first place read the communication he had that morning received from Capt. Hampton, which was as follows:—

Nov. 17.—I am pleased to inform you that we have to-day taken fine samples of lead from the 20 fathoms level, and, below the adit, at the little engine-shaft, and still now be a goodly ground, very fast, as it is standing all the while to the level above, in the bottom of which a winch has been put in a pretty good hole for lead and blende. The work taken out of the winch was the best lead we have yet seen, excepting the discovery now in the 20 fms. level below. The new engine-shaft is traversed by small veins and spots of lead, which act as feeders to the lodes, and the shaft will intersect them going down; it is a beautiful channel of ground, soft light-blue clay-slate, mixed with friable quartz as the little branches cross the shaft. At the old engine-shaft we are down to the back of the 5 fms. level, below the deep adit, and shall soon cross-cut to the blende lode at that depth. This work is being prosecuted with all speed, by eight men. The slopes in the back of the deep adit are worth from 2 to 4 tons of blende per fathom for the whole width of the lode; this lode will be laid open very fast, and large quantities of blende returned to me. The slopes in the back of the 20 fms. level are worth about 13*½* ton of blende per fathom. The various operations throughout the mine are progressing most favourably, and every week now finds a better state of things. We sample at end of the month from 50 to 55 tons of rich blende and about 7 tons of silver-lead ore. In future the sampling will be increased, and from present appearances, in a few months at most the sales of mineral will fully meet the cost of the mine. It affords me much pleasure to be able to write this report, and I congratulate the shareholders on such favourable auspices. It is about 12 months since we commenced active operations, and I have reason to hope that before another such period has passed away we shall be making dividends.—J. HAMPTON.

He (the Chairman) stated that, corroborative of the fact stated in that report, he had heard from another source that the mine had greatly improved.

Mr. ASH enquired the depth of the adit?—The CHAIRMAN said it was about 30 fms. from surface.—Mr. PETER WATSON enquired the amount realised per ton by the last sale of blende?—The CHAIRMAN said 5*l.* 12*s.* per ton, which spoke well for its quality.

He had also very good lead lodes, which will by-and-by be worked upon advantageously. Although operations were commenced but a short time since, two parcels of blende had been sold, and another was nearly ready for sale. That was one of the most substantial facts that could be adduced as to the intrinsic value of the mine, and one by which it could be favourably contrasted with many other mines that were commanding a much higher market value. He did not wish to speak invidiously of any other mines, nor did he wish to exalt North Chiverton at the expense of other mines in the district, but he thought it was not too much to say that, with the exception of West Chiverton, North Chiverton not only had up to the present time done more, but that it also presented prospects of a far more encouraging character, than any other mine in that now far-famed district. As an evidence that the mine was favourably regarded, not only by those in the district, but by the accredited authorities of other districts, he might mention the fact that a short time since after an inspection by Capt. Henry James, a gentleman took 100 shares, and, unlike mines generally, there never yet had been an unfavourable report made upon this mine. But, after all, perhaps the best proof of the legitimacy and value of the property was the returns that had been made in so comparatively short a time; and had not the erection of the engine been retarded by the contractors, the return would have been made two months earlier. They had also experienced another delay, in the erection of the crusher, which, although of comparatively small moment, had considerably retarded their dressing operations, and but for which there would have been by this time a more blende ready for the market. The reason this mine had not been talked of so much as some others that no attempt had been made to make it what was called a "sensational mine." Those who held the shares were satisfied as to its prospects; they knew it was in a good district, and that it was being economically and efficiently developed, and, therefore, they were satisfied to wait until the resources of the property were developed. As regards the accounts, he could state most positively that every item in connection with the late secretary was perfectly correct. The general meeting would be held at the proper time, when a financial statement would be submitted.

Mr. FERRIS WATSON said he was upon the mine some few weeks since, and from what Capt. Hampton told him relative to the general prospects of the mine, he felt justified in saying that it was a property of no mean order. There could be no doubt that both for position and prospects it was second only to West Chiverton. The mine was selling in the market for about 12,000*l.*, while the other was selling for between 180,000*l.* and 200,000*l.* He saw that the mine was provided with a powerful engine, and the floors were laid out, and that there were some good parcels of lead and blende on the mine. He thought there were good reasons to hope that North Chiverton would prove a very productive mine.—Mr. HAMPTON stated that Captain Hampton expected to cut the Old Shepherd Mine in a short time; it was the same lode that had produced in the Old Shepherd Mine such an enormous quantity of lead many years ago. When they got deeper in North Chiverton they might meet with the same results, in which case they would have a splendid property. The next three months would do more to show the value of the mine than all that had been done during the last twelve months.

The CHAIRMAN said that in the 20 fms. level—60 fms. from surface—there were now some fine stones of lead, so that when they began to drive east and west they were likely to find a very productive lode. During the last twelve months the time had been chiefly occupied in clearing the mine, operations having been suspended formerly in consequence of the difficulties of some of the largest shareholders.

Mr. FERRIS WATSON suggested that the present opportunity to offer a few consolatory remarks relative to the late lamented Mr. Dunsford. He need hardly say that his loss was deeply deplored by all who knew him, for he was a most worthy man, a staunch friend, and an able secretary; but there was no doubt he had too many companies to control, and the onus falling entirely upon him had unquestionably affected his mental powers, and his untimely death they all deeply deplored.

Mr. PEER suggested that the observations just made should be embodied in a resolution, and entered on the minutes.

It was accordingly unanimously resolved—"That this meeting desires to record its deep and sincere regret at the lamentable death of its late secretary, Mr. Dunsford; and, at the same time, to bear the highest testimony to his honour and ability during the time the management of the mine was in his hands."

The CHAIRMAN said that although at the present special meeting they could not go into the financial condition of the company, yet he did not think he was too sanguine in stating that at the forthcoming general meeting not only would no call be required, but he thought there would be a good balance in favour of the company, and judging from the

present favourable prospects of the mine, and taking into consideration what had been earned since the last meeting, and that it was probable the costs for the future would not exceed 300*l.* per month, it did not seem too much to hope that no further call would be required. (Hear, hear.) The cost of the operations of the past twelve months could not be taken as a criterion of the actual working cost of the future, because a considerable additional outlay had been incurred in providing the mine with the necessary plant, machinery, &c. If, as he computed, the returns would realise something like 200*l.* to 250*l.* per month, the mine would nearly pay costs, even if no further discoveries were made, which, he need hardly say, was scarcely probable. Shareholders were to recollect that, up to the present time, all the lead that had been returned had been in connection with the blende, and not from the actual working of the lead lode; he trusted, however, they would soon be able to lay open some good lead ground, and thus be able to make good returns of lead as well as of blende.

Mr. FERRIS enquired the extent of the set?—The CHAIRMAN: The surface extent of the set was ample to make two good sets; and it might be a question at some future time whether the property could not be advantageously divided.

Capt. BURGESS (of East Wheel Vor), after having examined some specimens of lead which had recently been brought from the mine, stated there could be no question that it was very good lead ore—in fact, better could not be desired. He believed North Chiverton was very favourably regarded by every practical man who had seen it. That it contained all the elements necessary to make it a good mine there could not be a divided opinion, and he had no doubt, when the property had been fairly tested, that their most sanguine anticipations would be realised.

A unanimous vote of thanks to the Chairman was passed for the successful manner in which he had conducted the affairs of the company, and for the satisfactory explanations he had given relative to the position and prospects of the mine.—The CHAIRMAN having thanked the meeting for the compliment, stated that as so large a number of his friends were interested in the mine it would continue to be his duty, in conjunction with their secretary, to promote the company's best interests. To accomplish this had been his anxious desire up to the present time, and as his efforts had been so far successful, the result achieved could act only as an incentive to still further exertion (hear, hear); and he need only say that by unremitting attention on behalf of the mine he hoped to continue to gain the support and approbation of all with whom he was associated in this enterprise. (Hear, hear.)—The proceedings then terminated.

WEST WHEEL VOR MINING COMPANY.

A general meeting of shareholders was held at the offices of the company, Austinfriars, on Monday.—Mr. JOHN SCHOFIELD in the chair.

Mr. J. H. MURCHISON (secretary) read the notice calling the meeting.

A statement of accounts, made up to the end of September, was submitted, which (after paying for the 50-in. engine) showed a balance of assets over liabilities of 1150*l.* 13*s.*

The report of the agent was read, as follows:—

Nov. 18.—I beg to hand you the following report of this mine, which is situated in the parish of Breage, and bounded on the north and east by the celebrated Great Wheel Vor, and on the south and east by the Great Wheel Fortune. Since last meeting we have costained the entire width of the set, and have discovered several lodes, including the well-known rich Wheel Metal and Carmel lodes of the two mines above mentioned. We have also sunk a new engine-shaft, 13 ft. long by 5 ft. 6 in. wide, perpendicular from the surface, and communicated with the adit level, which is 14 fms. 3 ft. in, under which we have sunk 11 fms. on the course of Carmel lode, which underlies south, and is 6 ft. wide, composed of spar, mundle, and gossan, with occasional stones of tin, but not sufficient of the latter to value—a more kindly lode cannot be seen for the present depth. We calculate at about the 30 to intersect the great elvan course, where good results may reasonably be expected, as in the adjoining mine, Great Fortune, at these intersections with the same elvan course rich bunches of tin were met with. If the ground continues as favourable as at present we hope to reach this depth in about seven months. We have also erected on this shaft a new 50-inch cylinder pumping-engine, which is working very satisfactorily, keeping the water in front working one stroke per minute. The shaft is sinking by nine men, at 16*l.* per fm. The adit level cross-cut is driven north of Gundry's engine-shaft 35 fms. We calculate to have about 20 fms. further to drive to intersect Oats, or Back Bone lode, and about 40 fms. further in advance to intersect Wheel Metal south and north lodes; driving by four men, at 2*l.* 10*s.* per fm. These lodes in Great Wheel Vor, adjoining us on the east, are worth over 1000*l.* per fm. We have also made roads for carriage of materials, &c., built smiths' and carpenters' shops, material and counting-houses, and have now all necessary appendages, both at surface and underground, for working the mine effectually. The number of hands employed is—underground, 14 men; surface, 7 men, 2 boys, and 1 girl; total, 24. With the present staff, the cost for the next three or four months will be about 150*l.* per month.—J. SOUTHEY.

The CHAIRMAN said he thought the proprietors would agree with him that the report just read was of an exceedingly encouraging character. There seemed every probability that events they had the satisfaction of knowing that it presented exceedingly favourable prospects. It could not fail to be satisfactory to know that within six months of the commencement of operations a 50-in. engine had been constructed, erected, and set to work, and the shaft sunk some 15 fms.; and as regards the financial position of the company, he might mention that, after paying for the engine, there was left an unexpended balance of 1150*l.*, while the working cost would not exceed about 150*l.* per month. He concluded by moving that the report should be entered on the minutes, and the accounts passed and allowed.

Mr. GUTAREZ enquired the distance of Edward's shaft, in Great Wheel Vor?—Mr. GUNTER thought the distance was about 100 fms. from the boundary of West Wheel Vor.

The CHAIRMAN said that great importance was attached by the Great Wheel Vor Company to the sinking of Edward's shaft; and as that shaft was sunk the prospects improved, spoke well for West Wheel Vor.

Mr. GUNTER mentioned that the same lode produced some excellent returns from a shallow depth in the neighbouring mines.—Mr. MANSELL having seconded the proposition, it was resolved that the report be entered on the minutes, and that the accounts be passed and allowed. A vote of thanks to the Chairman terminated the proceedings.

WHEEL ARTHUR MINING COMPANY.

A general and special general meeting of shareholders was held at Mr. Peter Watson's offices, Old Broad-street, on Monday.

Mr. PETER WATSON in the chair.

Mr. W. WATSON (the purser) read the notice convening the meeting.

The CHAIRMAN said that, by the notice which had been forwarded, each shareholder had been made aware of the late lamented death of their esteemed secretary (Mr. Dunsford). He (the Chairman) had known Mr. Dunsford for no less a period than 20 years, and therefore longer, perhaps, than anyone at present connected with the mining interest, and when he said that he deeply deplored his irreparable loss he knew he was but echoing the sentiments of all who knew him. (Hear, hear.) Probably it would be satisfactory to the shareholders to know that the books of the company had been investigated, and that everything, so far, had been found to be perfectly correct; and the accounts, as prepared by the purser, made up to the end of October (and including seven months' costs), he would at once submit. They were as follows:—

Balance last audit	£ 175 17 11
Miner cost and due	1451 15 6
Secretary for November and postage	21 6
Interest, discount, &c.	17 9 0—£1652 17 11
Call	£ 289 10 0
Ore sold	482 17 2= 773 7 9
Leaving debit balance	£880 10 9

The report of the agent was read, as follows:—

Nov. 18.—Since our last general meeting the operations have been confined chiefly to sinking the north engine-shaft, which is down 12 fms. below the 40 fms. level, under adit, and we have about 8 fms. more to sink before we meet with the junction of the north and Watson's lodes, which I hope will be completed by the end of February, or before, if possible. The ground in the bottom of the shaft consists of killas, mixed with spar, capel, and mundle, and a quantity of water coming out from the north side of the shaft, which I expect is coming from what we call our north lode, which is not far off; this shaft is sinking by twelve men, at 16*l.* per fm. The lode in Harris's slope, in the back of the 60 fms. on old lode, is 5 ft. wide, yielding about 3 tons of copper ore per fm. working by eight men, at 4*l.* per fm. The north lode, in Jurey's slope in the back of the adit west, is 3 ft. wide, worth 8*l.* per fm.; working by two men, at 3*l.* 10*s.* per fm. We have two pitches working on the middle lode, by four men; average tribute, 12*s.* in 1*l.* We sold at Truro, on Nov. 17, 384*l.* 18*s.* worth of copper ore.—T. CARPENTER.

The CHAIRMAN said it had been his intention to have called the present meeting some month or six weeks since, but as that meeting was not then called, and as the October cost-sheet was paid on Saturday, he thought the accounts had better be made up to that date, and so make it a seven months' account, but at the same time the copper ore last sold was not included.—Mr. A. RICHARDS enquired the amount realised by that sale?

—The CHAIRMAN: 814*l.* 6*s.*

Mr. PAGE wished to know which was considered the most important point of operations?—The CHAIRMAN said the most important point was the sinking of the north shaft. He need hardly say, as he was the largest shareholder, he was most anxious about the mine, and he could not but regard this north shaft as a feature of considerable importance. Some of the oldest shareholders around him would, no doubt, recollect that the north lode had yielded something like 50,000*l.* worth of mineral above the adit level, and also that Watson's lode had yielded between 3000*l.* and 4000*l.* worth; therefore, the reason that he attached so much prospective importance to the sinking of the north shaft was the fact that these two lodes would form a junction in depth. To reach this junction was the object they had in view in sinking this north shaft, and in some 8 or 10 fms. further sinking that object, they hoped, would be accomplished, where some important result might be met with.

Mr. HORWOOD enquired the present depth of the north shaft?—The CHAIRMAN said about 82 fms. below the adit, and the adit was 50 fms. from surface. It was encouraging to find that the channel of ground in which the shaft was being sunk was very favourable, being composed of mundle, killas, and spar; and, moreover, there was a quantity of water issuing from the point of operation.

Mr. A. RICHARDS wished to know the reason there had not been a meeting earlier?—The CHAIRMAN said he had already mentioned that he was anxious the meeting should have been held some weeks since, and all he could say in reply was that it was not held, but even if it had then been held nothing of any moment could have been communicated. In future, however, he hoped the meetings would be held regularly.

A SHAREHOLDER wished to know if the returns were maintained?—The CHAIRMAN said that not only were the returns maintained, but were gradually increasing, the last four sales having realised 126*l.*, 140*l.*, 214*l.*, and more than 300*l.*; and this increase of returns had been made without any material increase in the cost.

Upon the proposition of the CHAIRMAN, seconded by Mr. HORWOOD, the report was ordered to be entered on the minutes, and the accounts were passed and allowed.

The CHAIRMAN said that the next question was one of finance. By the accounts just submitted shareholders had seen that there was a balance against the mine of between 800*l.* and 900*l.* His own feeling, and in it he was supported by his colleagues, was that, taking all circumstances into consideration, it would be better to make a call of 5*s.* per share—3*s.* to liquidate the debit balance, and 2*s.* to carry on the mine.

After some discussion it was unanimously resolved, upon the proposition of Mr. HORWOOD, seconded by Mr. PAGE, that a call of 5*s.* per share be made, 3*s.* being the *pro rata*

one that is producing labour for the masses? From what I know of lithium carbonate, with oxygen, and in doing so evolves heat, consequently these Bath men must be careful, fearing they may by their explanation of it explode Mr. Fox's theory of interior heat.

The CHAIRMAN, I have only to say that the officials should set their juniors to take the opinion of Cornish and Devon granite about productive lodes and at a distance from these, and tell the public the constituent parts of each. Had I been in the position I should have done this the first year.

N. EXTON.

EAST GRENVILLE MINE.

I should not have thought it necessary to trouble you with the following remarks, but for the sweeping assertion of Capt. George R. Odgers in his report of the East Greenville Mine, a copy of which is contained in last week's Journal:—"If the ore does not run to the 15 fms. level, every practical miner that has seen it will be greatly deceived." I do not respect to Capt. Odgers, I beg to deny the above statement, as a practical miner of 35 years' experience. I have inspected the above mine regularly, and in consequence of the most respectable mine agents in Cornwall, who unanimously agreed with my opinion that the ore driven through in the 65 fms. level will not last down to the 75 fms. level, in consequence of there being such a manifest difference in the character of the ore in the two levels. In the 65 fms. the ore was first met with in the elvan, and consequently in decomposed granite. The 75 fms. is hard and compact granite, and the ore consequently, small and poor.—Redruth, Nov. 22. ABRAHAM JAMES.

MAGNESIUM, AND ITS LIGHT.

Mr. Livingstone, Bishop Colenso, and Magnesium were three of the chief attractions at the late meeting of the British Association in Bath. Mr. Roscoe, at his lecture on light, in the theatre, had a table covered with specimens of magnesium, crude, purified by distillation, and in wire. In his hand a lump of distilled metal, 9 lbs. in weight, and about the size of a man's hat, he presented it to his audience as an evidence of the progress made within a few years, before which magnesium was only known in impure and in grains, and preserved as a rarity in a few laboratories. The progress the world is indebted to Mr. Edward Sonstadt. About the beginning of 1861 he attacked the problem of the commercial production of magnesium. After many prolonged pains and countless and costly experiments, his efforts were rewarded in 1863 he presented the Royal Institution with a fine lump of the metal; and in the present year he has been favoured to see a Magnesium Metal Company (Limited) established in Manchester to work his patents, and who advertise themselves as ready to supply magnesium in any quantity for which there may be a demand.

The first use to which magnesium has been applied is as a source of light. Its value as an illuminator has been foreseen by Mr. Sonstadt set to work. Prof. Roscoe, in 1859, discovered the fact, and a commission under the Austrian Government verified by experiment its prodigious light-giving power, and only on the score of expense, and with respect to its employment as impracticable—a reason which has now ceased to exist.

At the Theatre Prof. Roscoe stated that "a burning magnesium wire of the thickness of 1/16 of an inch evolves as much light as 74 stearine candles, of which five go to a candle." This light lasted one minute, 987 metres of wire, weighing 120 grammes, being burnt. In order to produce a light equal to 74 stearine candles, burning for 10 hours, whereby about 20 lbs. of stearine is consumed, 72.2 grammes (2 3/4 ozs.) of magnesium would be required."

Practical evidence on this head he quickly added. Two lamps, with large reflectors, which emitted a magnesium wire were paid by hand as they burned, were lighted, and the house was flooded with a rich white light, as soft as brilliant, in which the ladies' dresses and the bloom of their complexions were displayed as in daylight. All eyes kept wandering over the scene, in order to enjoy the most delightful effect. When at last the magnesium lamps were extinguished, the lights, which had been overpowered by their superior radiance, seemed changed into faint glimmers, yielding a dim, sickly, and dirty yellow illumination.

From the richness of magnesium light in acetic or chemical rays, Sir Charles Lyell, Mr. Milner, and his photograph taken at the spot by means of two or three bits of magnesium wire waved about while held in wooden clips; and shortly an excellent photograph of the prince of geologists was thrown on a screen by the electric lantern, amid the loud applause of the assembly. At the close of Prof. Roscoe's lecture, Mr. Ladd exhibited an electric light, derived from 60 cells of a Grove's battery, when a gentleman stepped forth and held alongside two burning magnesium wires twisted together. The intensity of the electric light was manifest, but the magnesium light did not suffer by the comparison, and, considering the simple and impromptu way in which it was obtained, its practical value was most effectively demonstrated.

This exhibition of magnesium by Prof. Roscoe excited much interest, and the shop of an enterprising chemist in Bath, who advertised "Magnesium wire for burning, 3d. per lb." was day after day thronged with purchasers. It seemed the general opinion that photography would receive a new extension from the magnesium light. Carves, mines, and the interiors of the pyramids could now be revealed in myriads of places. The photographer would now be enabled to pursue his calling under the gloomiest of the darkest sky, and very probably he would be called upon to devote his evenings to the time when busy people especially are most at leisure to sit for their portraits. Photographs of Sir Henry Holland, Prof. Faraday and Roscoe, and other celebrities taken at night by the magnesium light, were freely handed about, and except for the description no one could have detected a difference between them and the best work of the best artists.

From photography it was very plain that in magnesium a new signal light was required, for, for hardness at least, set the lime and electric lights at defiance. Any one with a bit of magnesium wire and a lucifer match can in an instant produce a light which may be discerned miles off; indeed, the light has been plainly discerned at a distance of 25 miles at sea—how much further remains to be determined. In rockets and torpedoes the filings of magnesium scintillate with a dazzling, far-reaching, and unextinguishable power. Already several Governments have taken magnesium in hand, and are actively prosecuting experiments, which, if satisfactory, will result in magnesium being entered as a stock commodity in all their arsenals. Theatrical managers are also experimenting with a view to new sensations in Christmas pantomimes, and Eastern bazaars. The light highly convenient in examinations with the spectrum of chemical elements discover a hundred uses for it in the laboratory. It is said some shopkeepers will astonish the Londoners with the light in the course of the winter. Already patients have been taken out for magnesium lamps, and others are promised. The progress to which the light may be applied are manifold, and every month reveals new ones. Some gentlemen at Bath drew unfavourable inferences against the extensive use of the metal from the high price of the wire; but, if we are not misinformed, 3d. per lb. is merely a provisional and experimental figure. Whenever there arises a fixed and ascertainable demand, quite a different price will be quoted. As everybody with any practical experience may know, price is governed by the scale of production. If iron wrought on the same scale as is magnesium at present, we question whether iron could be vendible retail at 3d. per ton.

Chemists are aware, magnesium is one of the most abundant metals in Nature. While entering into the composition of a large number and variety of less abundant metals, it constitutes 13 or 14 per cent. of dolomite or magnesian limestone, a rock which is found in almost all parts of the world in enormous quantities. In England, for example, the magnesian limestone formation extends from Tynemouth to Nottingham, and covers an area of 147 miles, and over at least part of that long line is fully 600 feet thick. Since the discovery of the existence of magnesium in the composition of carbonate of lime, but carbonate of magnesium by itself exists in immense masses in some parts of the world, as, for instance, in Greece and in India. In the ocean, moreover, magnesium exists in such quantity that Mr. Sonstadt has calculated that it contains 100 cubic miles of the metal—a mass so great that it would cover the entire surface of the globe, both sea and land, to a thickness of more than 8 feet.

Mr. Humphry Davy, in 1807, first revealed the existence of magnesium; but nearly 50 years elapsed ere a Sonstadt was found to throw wide the doors to the vast mass wherein it lay stored. Human nature will be changed indeed if these vast stores should be again made available. Not only one of the most abundant metals, magnesium is among the most beautiful. When thoroughly pure it is as white as silver, and receives a high polish, and is easily kept clean. Moreover it is very light, its specific gravity being 1.74, or less than a fifth the weight of copper, and almost half that of aluminium, which is 2.60, and until the appearance of magnesium considered a marvel of lightness. An ounce of magnesium and an ounce of silver represent very different things. At present, many of the peculiarities of magnesium are undetermined; like all new metals, it has a character and oddities of its own, which will only become intelligible by its multiplied experience. In some cases it shows itself very brittle; in others it is as tough as iron, and in some it is as malleable as gold. It is a metal of many uses, and its properties are being tried by hand, as a magnesium button found in the body of a man who had been shot by a bullet of the Crystal Palace, and a medal with ease and perfect success. To what uses, in addition to burning as a light, magnesium will be applied it would be idle to speculate; time and trial alone will make manifest, but we think we may safely predict that in the appearance of this metal we behold a new agent of civilisation—one which will write a broad line on the page of history.—Telegraphic Journal.

THE LAKES COAL FIELDS (NEW ZEALAND).—Steps are at length being taken by the Nelson Government to open these extensive coal fields. As it is impossible to raise the necessary capital to work the mines in a profitable manner in New Zealand, the authorities are about to send Mr. J. Burnett, who has had considerable experience in coal mining in England, to London, to form a company and raise the necessary capital; this gentleman will be furnished with plans, views, &c., of the district, and will also bring several tons of the coal with him. There can be no doubt as to the extent and value of these mines.—Journal of the Society of Arts.

WORKING IN THE INTERIOR OF AFRICA.—Speaking of the natives of Africa, 300 miles from the coast, at a recent meeting at Nottingham, Dr. Livingstone said, "I have been to the interior of Africa, and very excellent iron it is wrought home with me the last time I was in England some of the ores, and the iron was manufactured in an excellent English rifle. The quality was exceedingly good, and equal to the best Swedish iron. They also manufacture a very superior quality of copper." They are known to possess an alloy of iron which would be of great value in the arts; but the German traveller who incidentally mentions this was not aware of its importance, and took no pains to be informed on the subject.

THE LAKE SUPERIOR MINES.—A correspondent of the New York Journal of Commerce says:—"Already about one hundred copper mining companies have been formed, and are in successful operation; twelve iron mining companies, shipping annually 200,000 tons of ore, also smelted silver, lead, and gold mining companies, have just commenced operations. The united mining interests employ an immense amount of capital, and give profitable employment to thousands of workmen. The export of copper during the year 1863 was 10,044 tons, and iron ore and iron, &c., was 190,000 tons, both of which will be largely increased the present year."

division of the debt cost, and 2s. to be appropriated to the future working of the mine.

The committee of management were unanimously re-elected. The Chairman said the next object of the meeting was to appoint a secretary in the room of Mr. Dunsford, to whose lamented decease he (the Chairman) had already referred. But before proceeding to the consideration of that question, he wished to obtain the approval of the shareholders of the course which, upon his recommendation, the committee had taken as soon as they became aware that the office of secretary had become vacant. The committee at once met, and passed a resolution that the proposer should make application to the representatives of the late Mr. Dunsford to hand over the lease, books, &c., of the company. The application was made, and the lease, books, &c., were handed over. A resolution was unanimously passed approving the action of the committee. The Chairman said the next question was the appointment of a secretary, and the committee were unanimous in recommending that Mr. J. H. Murchison should be appointed to the vacant office. They believed that in Mr. Murchison they would find an able secretary—one that would efficiently discharge the duties of the office, and do his utmost to promote the welfare of the shareholders.

Upon the proposition of Mr. Alfred Richards, it was unanimously resolved that Mr. Murchison should be appointed to the vacant office. Mr. A. Richards proposed a vote of thanks to the Chairman for the very lucid manner in which he had explained the position and prospects of the mine, and for his able and courteous conduct in the chair. Mr. Horwood having seconded the proposition, it was put and carried unanimously.

The Chairman having appropriately acknowledged the compliment, said that it would continue to be his anxious desire to do all that lay in his power to promote the best interests of the shareholders. In doing so, the interest of no individual would be so advanced as that of his own, and probably the most substantial guarantee he could offer that his efforts in that direction would be unremitted; and if they proved as successful as they would unquestionably be unremitted, there would yet be a fair day for Wheel Arthur. The proceedings then terminated.

TRUTH'S ECHOES, OR SAYINGS AND DOINGS IN MINING.

There has been more activity in the Mining Share Market during the past week, and a moderate amount of business appears to have been transacted. In East Lovell, Great Laxey, Great Wheal Vor, East Grenville, and a few others, there have been extensive dealings; and there is reason to hope that a more steady and satisfactory market will follow, as the Bank rate of discount is easier, and the standard for copper ore has advanced.

Wheal Setons are being sought for at buyers' prices, which is under the quoted figures of the day. West Setons continue quiet at present market prices. Cliffords have been largely dealt in, and prices have advanced. East Bassett's command attention, and buyers found at improved rates. Nangles are in better request, and slightly improved in price. East Carr Breas have changed hands at fair market figures. Wheal Bassett are quiet at quoted prices. North Bassett and Wheal Buller are dull at present figures. Tincrofts are not quite so active, but sought for at nominal prices. East Grenvilles have shared largely in the transactions of the week, but prices have fluctuated. Wheal Grenvilles have been in better demand, and slightly improved. Great Laxey's have been largely dealt in, and a great number changed hands at advanced rates, with a strong tendency to further improvement. North Trekerries are enquired for at nominal figures. North Rosekars have been in better request. Crofts are remarkably quiet at present quotations. South Conduwors are dealt in at nominal rates. North Shepherds have been rather freely dealt in, but left off weaker. Wheal Kitty (St. Agnes) have changed hands, and been sought for at buyers' prices.

Halleshales are being enquired for at buyers' prices. Great Wheal Rhy and East Rosekars are more than ordinarily quiet. Westworth Consols have been freely dealt in, but prices have fluctuated. West Chiverton and Chiverton are firm at present quotations. East Wheal Lovells have been daily dealt in, and a large number changed hands; prices have varied, but there is a strong tendency to greater improvement. Great East Lovells are also enquired for at nominal prices. East Vons have been in demand, but prices have varied. Great Wheal Vons have shared largely in the transactions of the week, and although they slightly varied left off firm. Stinney Wheal Metals have been in request. New Rosekars have been quiet. Providence and Margaret are being sought for at minimum rates. East Caradons have been freely dealt in, but prices have varied. West Caradons are offered at lower prices. Trellawny and Mary Ann are rather quiet for the present. Kelly Bray and New Wheal Martha are rather inactive. Lady Bernthas have slightly improved. Hingston Downs are in request. East Wheal Russells have been freely dealt in, but a reaction appears to have since taken place, being more freely offered. Wheal Crenons have declined, there being more sellers than buyers.

East Caradon.—The 70 ft. on the counter, has improved, but there is a falling off in the other ends, as appears by the following report:—The counter, in the 70 ft. level east, is worth 18s. per fm. The 80 east is worth 10s. per fathom. The 80 west is poor. New lot: The 60 east is worth 8s. per fathom. The 60 west is worth 5s. per fathom. The 80 east is worth 5s. per fm. The 70 ft. level east, on the south lode, is producing saving work.

Wheal Pair.—The operations here are of a satisfactory character, and there appears very little doubt that by the time they are down to the 30 ft. level a long run of tin ground will have been laid open on the several productive lodes, which will place the mine in a paying position. The sinking the last lift has proved rather expensive, in consequence of passing through the hard bar of ground, which is now nearly out. The sale of tin for the last quarter amounted to 603s. The current three months' sale is likely to be increased.

Wheal Crozon.—At the shaft, which is down about 8 fms. under the 96, there is a large and promising lode, which at present is not very productive. The 96 west is in a large lode, yielding from 3 to 4 tons per fm., and presents improving appearances. Important discoveries are anticipated as this end approaches the western cross-course, which is about 15 fms. ahead, and in the upper levels large deposits of ore were found both east and west of the cross-course. There is a good run of ore ground in the winch sunk in bottom of the 84 west. There is a slope in bottom of the 84 east, and a pinch in back of the same level, yielding 3 tons of ore per fm. each. The sale last week realised upwards of 600s. The other operations which are being carried on, and the general prospects of the mine, are far more encouraging for the current quarter than the past.

At New Birch Tor and Vitrifer Consols there are several points which have improved during the past week, and the mine generally is looking far better than for some time past. The next sampling of tin is expected to be larger, and a greater amount of profits on the workings for the next quarter. Devon Great Maria: The operations are progressing rapidly and satisfactorily, and the new shaft will be down to the present adit in about three weeks, when it is intended to sink on the course of the newly-discovered lode, the development of which is expected to result in great discoveries. North Devon: The operations here continue of the most satisfactory and encouraging character, and it only requires time to bring the mine into a good profitable and paying property. The several levels and productive points are yielding increased quantities of lead. The samplings in future may be estimated at full 40 tons per month, which will leave a very good profit.

Maudlin.—Many a rich mine has been left undiscovered for the want of a little patience and forbearance, but it cannot be said that either of the above virtues has been neglected here; and it, therefore, becomes gratifying, from the perseverance which has been manifested here for a series of years, to find a great probability of the present proprietary becoming the possessors of a rich and valuable mine. In driving the 70, east of the pump, they have made a very important discovery: the lode is 2½ feet wide, and yielding large rocks of rich grey and yellow copper ore from 2½ to 3 cwt. in a body. They are now opening by the side of the lode to facilitate the removal of the whole, and pressing on the end to ascertain the full value of this discovery.

North Chiverton.—The general prospects of this mine are considered of a very satisfactory and encouraging character, and the more the several points of operation are pursued in the development of the lodes the more cheering are the appearances. Blende at present predominates, but as the ground is opened in depth lead becomes largely disseminated throughout the lodes, and taking into consideration these favourable changes, with the congeniality of the ground for lead, there is very little reason to apprehend results contrary to present prospects.

Great Wheal Metal.—The prospects here continue of the same important character as last noticed. The lode at the eastern shaft is still worth 15s. per fm., but the water is on the increase. Arrangements are being made for drawing the same, to enable them to prove the lode deeper, when permanent and efficient machinery will be erected. The lode at the western shaft is of the same value, and other operations are going on satisfactorily. East Wheal Lovell: The new shaft is rapidly approaching completion to the bottom of the diagonal shaft, at which point they will open east and west for 40 fms. level, on a rich course of tin. The operations there in sinking have been facilitated by their sinking, or passing, and the lode, when the ground is entered, and the most favourable. The lode seen is worth from 65s. to 75s. per fm.; consequently, the shaft will be down in about a fortnight from the present time, when the lode in the bottom, still worth 150s. per fm., will be in good returning order. In sinking the shaft on the south lode, below the 28, a great improvement has taken place; the lode continues to maintain its size, but increased in value; now worth 95s. per fathom, and still improving. At Turnpike shaft the lode has further improved during the past week, and is worth 25s. per fm.; and from the continued improvements which have been made, the facility of working, and the rapidity of returns which can be made from this point alone, render the prospects of Great Wheal Lovell second to none.

East East Lovell (Breas).—The engine, a 50-in. cylinder, is now on the mine, and the heaving in of the same will be shortly commenced. They have opened on five distinct and highly-promising lodes, and as soon as the necessary arrangements are completed they will resume operations on all. Wheal Prosser: Although they have not yet cut into the Trewas lode, the branch or leader intersected by the cross-cut in the 40 is improving, which is a very cheering omen. East Von is reported to have improved in two or three points, but especially at the shaft, where they have some good work for tin.

The melancholy death of the late Mr. W. J. Dunsford has thrown the mines connected with his office into competition; at least there appear to be efforts made by different parties to obtain the representation as secretaries of particular mines not yet arranged. Mr. Wm. Michell, of St. Michael's-alley, is an applicant for the Bryn Gwilog, Billings, and Long Rake Mines, and perhaps no man is better qualified for the position of manager or secretary; for, independent of his long experience as a mining agent, especially in Wales, his acquaintance with the above mines, as originator or pursuer in two, if not the whole, renders him doubly qualified for the official position desired; therefore, the shareholders in the respective mines will only be consulting their own interest by appointing Mr. Michell manager.

JAMES LANE.

From Mr. EDWARD COOKE:—There has been a large business done this week in several of the most prominent mines, and it is the general impression that in the spring of the next year there will be greater buoyancy in the market than has been witnessed for a long period. According to present appearances, money will gradually become cheaper, owing, in a great measure, to the limited engagements (compared with) of the commercial community, and the disinclination on the part of the public generally to enter into speculative transactions during the past few months. The decline in the rate of interest and discount invariably affects the price of metals most favourably. We may, therefore, look forward to the future with a great degree of confidence. To be forewarned is to be forearmed, according to an old adage, and those who take advantage of cheap markets naturally derive the benefit of rising markets. The present is a favourable opportunity for buying into a few good mines. There are many such that may be invested in with a great degree of certainty of success. I do not mean that shares should be bought to-day and sold to-morrow, as that is merely a species of gambling. The largest profit would be made by buying now and holding until the early part of next year. In the meantime there will be a great advance in many mines. Among them I will mention STINNEY METAL, CHIVERTON MOOR, NORTH CHIVERTON, EAST LOVELL, GREAT EAST LOVELL, the several mines in the Grylls district, BINCH TOR, SOUTH DARRKEN, NEW WHEAL MARTHA, EAST WHEAL VON, and others.

Fluctuations have taken place in East Lovell. This is only a natural consequence when shares advance from 8s. to 16s. in a few weeks. I still adhere to my former opinion with regard to this mine, and feel more confident than ever that it will ultimately become a permanent and valuable dividend property. The discovery of tin near the Helston and Penryn road, alluded to in the agent's report, is most important, seeing that the lode can be wrought upon at such small cost. In addition to which there are the

other rich parts of the mine, which now that the engine-shaft is nearly completed will soon be returning large quantities of tin, and those who hold their interest for a few weeks will have no cause to regret it. CHIVERTON MOOR: In the Notices to Correspondents, in last Saturday's Journal, some remarks are made by a party signing himself "Shareholder, Liskard." Seeing that the executive is the same as that of West Chiverton, and the business of the company is conducted at Liskard, "Shareholder" (if he is a bona fide one) need not resort to the Journal for information. He states that, nothing of importance has occurred since he bought his shares at a high price. I consider the erection and putting to work of an engine of such dimensions as that of a 70-in. cylinder, a very important object indeed. This has now been accomplished. The statement that it is contiguous to, and having the same lodes as, the famed West Chiverton is quite true. With regard to the price he paid for shares, I consider that no criterion of the prospective value of the Chiverton Moor Mine: 15s. per share was thought a very high price for West Chiverton some eighteen months since, but time has proved it to be a splendid purchase to those who were fortunate enough to buy. I confess that I deemed it a high figure, and refused 50 shares (from the parties who purchased the mine) at 15s. and free, when offered to me.

It is not at all improbable that CHIVERTON MOOR shares will see a very much higher figure before the mine has been so long operated upon as West Chiverton has been. EAST WHEAL VON has improved at the engine-shaft, in which there are now rich stones of tin. This augurs well for the future of the mine, as there are great probabilities of its being the precursor to a rich deposit of tin. The shares have been largely dealt in, and parties in the locality of the mine have been buyers. This mine is an excellent speculation, and likely to become another important tin mine in the Great Vor district. The engine-house is nearly completed at GREAT EAST LOVELL, and the engine upon the mine. There are numerous lodes in this set, which, with the continuation of the East Lovell lode, and the already existing evidence of being productive when wrought upon at moderate depths. There are only 3000 shares, and there is a capital in hand of about 15000, to 20000, after the engine is paid for. The shares will certainly have a great rise in price. The usual amount of speculation has been going on in East GRENVILLE. There are so many conflicting reports as to the merits of this property that the public appear to stand aloof from dealing in the shares at all. At the meeting of NORTH CHIVERTON shareholders, Mr. J. H. Murchison was appointed secretary to the company, from whom any information may be obtained. The mine is progressing well, and the shares, at 3s. to 3½, are as cheap as any mine in Cornwall, and will be pounds higher ere six months have elapsed. The Bank rate having been lowered will give an impetus to the Metal Markets, which have become unduly depressed during the past six months.

P.S.—I am advised to-day (Friday) of the Shepherd's lode having been cut through. It is a splendid lode, 12 ft. wide, saving work for lead and blende, and improving.

From Mr. JAMES CROFTS:—In the mines specially recommended of late by the writer a considerable business has been transacted, the majority of them being, in fact, the favourites of the market and of the public, were such as FRANK MILLS, GREAT LAXEY, NEW BIRCH TOR and VITRIFER, GREAT VON, and TINCROFT, all of which are paying excellent and apparently permanent dividends, and, therefore, are equal in safety as investments to any railway, bank, or other safe stocks. Of non-dividend, but equally safe either for speculation or investment, the enumeration is EAST WHEAL VON, BEDOL-AUR, SOUTH DARRKEN, CENTRAL MINERA, NORTH CHIVERTON, and BRYNALT. A third class, as speculations only for a rise within a reasonable period, are WHEAL HARTNETT, WHEAL HOPE, PRINCE OF WALES, KELLY BRAY, SOUTH GRENVILLE, GAWTON, WHEAL UNITY, and ST. IVES WHEAL ALGER, all of which are believed to be no far from safe. As to the following, the chances are low that those who have to hold any purely speculative shares will do well to exchange into such of the above as may suit their fancy, whether dividend or otherwise. It may not be inopportune to allude, as showing the wrong direction of capital, to the disastrous results of several mines brought out last year (notably GOLD), in two of which (together 125,000 shares, and limited, the actual loss of one of them of the entire capital) may be estimated including premiums of not less than 300,000; and apropos of losses of this nature, where the public rush blindly into them, it was lately remarked by a contemporary writer in the Journal, that a certain sum would buy up the entirety of a certain number of British copper, tin, or lead dividend mines; and to follow such a course of investment, which is believed to be no far from safe, that the said sum of 300,000, actually thrown away would have purchased the following dividend shares:—6000 New Birch Tor and Vitrifer (the whole mine), 5000 Frank Mills (the whole mine), 6000 Tincroft (the whole mine), 5000 (out of 12,500) Great Laxey, 2000 (out of 5000) Great Wheal Vor.

WEST WHEAL VON, tin, at Helston, in 4066 shares, upon which 11. 10s. per share has been called, representing 6000l. of premium and outlay. At a meeting held by Mr. Murchison on the 21st inst., the accounts showed 1150s. cash in hand, after paying for the new 50-in. cylinder engine and all other costs. As the report stated that at 30 fms. deep, and in seven or eight months, they expect to cut the Carmuel lode, which is the source of the Prince of Wales (which made all the tin in Great Wheal Vor), these shares are certainly worth attention.

The market this week has been fluctuating in character—one day dull and another lively; but the mine most in the ascendant has been EAST WHEAL LOVELL, the reports from which are good, and advanced the shares very nearly to 16s., now about 15s. The two late favourites on the market—EAST GRENVILLE and WHEAL GRENVILLE—have had a considerable fall, being about 2s. each lower than the maximum quotation of late; consequently, according to rule which is generally safe to follow, they ought to be bought. NANGLES have been very much exalted, but not effectively, having descended to 18s. 10s., but, according to some accounts, the apathy of the public to their merits is misplaced. The shares are low (102s.), a fact which should not be lost sight of in estimating the value of any mine. On this point, BEDOL-AUR is in 3200 shares, and advertised at 12s. 6d. per share, whilst Prince of Wales is in four times the number (12,800), and sold lately at 4s., which would make Bedol-AUR worth at least 16s., independently of the fact that the latter is now raising ore about equal to costs, whilst the former is unproductive so far, and making constant calls. The discrepancy, however, in the true estimation of these shares arises from one being a "market" mine—"jobbed" in, whilst the other (Bedol-AUR) has not yet arrived at that distinction. From hence an inference: either the public are paying too much for one mine and too little for the other, or that the merits of the Prince of Wales are over-rated. It is not intended, however, to be displayed in hazarding this conjecture.

The late Mr. DUNSFORD's mines, 47 in number, good and bad, represented a yearly income of 5000l., and, as might be expected under such circumstances, considerable competition has arisen for their future management, which has resulted thus far, however, in only a few being transferred, and amongst those are the important ones of QUEBRADA and NEW WHEAL MARTHA. Mr. Murchison has obtained NORTH CHIVERTON and WHEAL ANTRU, which increases the mines in his office to 116. A negotiation is now in progress to centre the majority of those remaining in one individual management, but it is probable that some few may be transferred to the country management from whence they came, and for the rest, bad and doubtful ones, the event of Mr. Dunsford's death will in all probability bring their history to a crisis; whilst, on the whole, there can be no doubt that the energies of half a dozen managers selected from amongst the best offices the market affords, may prove more efficient to individual mines than the concentration of such a large number in one hand, which it now appears to be discovered and admitted was too much for one mind to encounter, a sentiment in which, however, the writer does not exactly concur, it depending upon the quality or aptitude of that mind for a peculiar and irritating business, and its freedom from other distracting causes which might interfere with duty, and, in such cases, as belonging to the office of paid clerks. It is an aphorism of Dr. Franklin that "A master's eyes will do more work than both his hands;" but for the rest, and for the future, *non verborum.*

From Mr. WILLIAM LELAND:—There is no doubt that a man who has spent all his substance, or who is spending in excess of his income, will some day find himself in a very disagreeable position. The man who is spending more than he is earning, but who wonders still more to find those who very gravely advise him that no such consequence should follow either of the acts I have spoken of, and that where it does follow it is the fault of the money spent, and not of the thoughtless or profligate spender. If the currency were what it should be, say they, no such consequence would be experienced. We might go on spending *ad libitum*, for we should find the volume of the currency expanding in proportion to our wants or desires. I do not know that any of the currency doctors would put forth a proposition in this precise form, for to do so would be to exhibit in a very striking light the absurdity of their theory. But though in individual cases it cannot be held that the community, they allege, may, if the community does not make up its mind to its individual members, whose several individual acts produce those consequences which we call national. The Bank of England is a great banking corporation, and, like other banking corporations, its legitimate object is to realise profits, in the pursuit of which object it is placed under no restraints or obligations, other than those dictated by sound monetary principles and ordinary commercial prudence. It is also a bank of issue, whose obligations are defined by Act of Parliament, and the chief of which may be summarily defined to be that of confining its issues of promises to pay within the limits of its ability to pay. There seems to be nothing very preposterous in this, but only that obviously just and necessary restraint which the Legislature has bound the Bank to observe, and which is established by the privilege of issuing that which constitutes the currency of the country. This, however, is objected to by the currency doctors, who attribute all our monetary and commercial evils to it. "Give the Bank liberty to issue what amount of notes it pleases," say they, "without any obligation to hold gold or Government notes against them," and then "it would go on discounting bills and advancing upon other securities," so that, there being no want of money, there would be no commercial embarrassments, and all the inconveniences that now result from excessive expenditure, reckless speculation, gambling, wars, bad seasons, or any other conceivable evil would be unknown. It is scarcely conceivable that those who put themselves forward to correct the world's follies should begin by contradicting that which all past history and experience aver—that every evil entails its appropriate consequences. This is obviously one of the principles of the Divine government, and it is not within the power of man to reverse it. Human wit or wisdom may sometimes postpone or mitigate the consequences of an evil, but that is all. It is the same with money as with everything else. The abuse of the power brings after it the punishment, which will be in proportion to the magnitude of the evil. Let the Bank of England issue as many notes as it pleases, without any obligation to hold gold or Government notes against them, so that they might continue to discount their customers' bills "without hesitation or limit, and all would, no doubt, go on swimmingly until the volume of the currency became so great as to cause a proportionate depreciation in its value, and a diversion of the gold—that is, the real money—into other and foreign channels, and then would come the crash, which it had been sought to evade, and the consequences would be great and lasting in proportion to the obligations that had been incurred without the means of discharging them. From time to time we have had associations and societies which were to bring about such a reform in the currency as should ensure to everyone a good banking account, whatever might be the number or amount of the cheques drawn against it; but the common sense of the community has at once perceived the absurdity of the proposal, and detected the fallacies by which it has been attempted to recommend it. It is now proposed to add another to these abortive attempts to get rich by spending. The result will be as it has been before. Our monetary system has not been hastily or incautiously adopted. The investigations by which it was preceded, and by which it has been followed, exhausted the whole subject, and a reference to the ponderous Blue Books in which the evidence of all descriptions of theorists, as well as of all descriptions of practical men, is preserved, will show how miserably the advocates of an unrestricted paper currency failed to make out even a moderately plausible case, or to meet the formidable objections which oppose themselves to their proposals. That these ever-recurring monetary crises are extremely inconvenient to all, and ruinous to many who have had no hand in bringing them about, is not to be denied; but we have never yet heard of a currency which can ensure us against them, nor of one that is not far more calculated to produce them in an aggravated form than the one we now have. The most perfect system of currency which the wit of man may devise will not ensure us against the adverse consequences which the greed of gain, or the spirit of gambling, or even the vicissitudes of the seasons, or the whims or necessities of other nations, have hitherto occasioned.

In the meantime, it is admitted that "the present crisis has been the worst, and is now the dearest, that our nation has ever known." The Bank begins to reduce its rate of interest. Money is becoming so plentiful that discounts may be had at 5 or 6 per cent., while the English funds are becoming more and more buoyant and higher in price, and though the continued, but greatly diminished, disturbance in the commercial circles, both at home and abroad, still keeps many minds in a state of uneasiness and indecision, the great majority of good securities partake of the improvement, mining shares amongst the rest, but as they are less dependent than almost anything else on extraneous circumstances, they are, of course, less affected by them. Those,

however, who have taken my advice, not to be frightened out of shares held by me so as to realise at any price which a depressed market would produce, already find the advantage in it; as do also those who, at my suggestion, bought at a price well advanced towards what I believe will prove unusually large profits, and in others more at very low prices. Of these I would especially recommend, for either temporary or permanent investment, the GREAT LAXEY, which continues to rise in price; three months since they were selling at 15s. to 16s.; they have, gradually, reached 18s. and they will, I have no doubt, be at 25 within four or five months from this time. SOUTH CHIVERTON, in which the operations are being carried on with very satisfactory results, will soon, I have no doubt, bring them on to a rich lode, the ground becoming more congenial for lead as they drive south; I repeat what I have many times said, that before long this will become a mine of great profit. The NORTH CHIVERTON is also progressing satisfactorily. Shepherds lode, into which it was last week, they had just cut at the 20, has been cut through, and is, as was anticipated, a strong lode, consisting of lead, blende, &c., and promises large quantities of these minerals richer in quality than any yet seen; and to complete their agreeable communications they state that they shall next week sample as much silver-lead ore as will realise upwards of 400s. The EAST LAXEY should certainly find a place in the mine venture that promises well; and the same may be said of EAST TREKERRY and MINERA, SOUTH ST. IVES, SOUTH DARRKEN, and BEDOL-AUR.

FOREIGN MINING AND METALLURGY.

From St. Dizier, we learn that after a prolonged drought, interrupted only a few days' rain, the works have now to fear frosts, the rigours of which have begun to make themselves felt. Refining pig is at present neglected at St. Dizier, its quotation being almost nominal, at 4s. 12s. to 4s. 14s. ton. Mixed pig is held relatively much better, although its price varies considerably according to the proportion of coke used, and also according to the furnace from which it may have been produced. One furnace has placed its production for some months at 4s. 4s. per ton, with an engagement not to exceed 10 per cent. of coke, and to mix with the production a certain addition of manganese. Another furnace, producing coke-made pig, has also sold its production for several months at 3s. 12s. per ton. The demand for iron at St. Dizier is limited to the strict requirements of consumption; at the same time, some forges have orders in advance, although this arises from checks occasioned by repairs or low water. The price of rolled iron, the Haute-Marne is 9s. per ton, or 8s. 16s. per ton when orders are of some importance. Hammered iron remains without change, at 10s. 4s. to 10s. 12s. per ton, sales making 12s. to 16s. per ton additional. The foundries of the Haute-Marne group have supplied, the successive improvements introduced, the finish of the castings produced, the variety of the patterns available, having procured the works some good orders, which would otherwise have been executed in the Ardennes. While the Haute-Marne presents only chequered results, and is even depressed as regards some branches of its industry, everything looks well at the other end of the valley, where prices are maintained. The future is full of promise to this group, and numerous projects are every day presenting themselves. Thus, two great companies, possessing rolling-mills in Centre, now propose to construct blast-furnaces in the Moselle. Their establishments display a corresponding activity. Thus, the Ottange Company, which already possesses three blast-furnaces in activity, will light a fourth before the end of the year, and tends to construct a fifth, which will be completed before 1866. Great attention continues to be paid to the development of new means of transport in France, and other projects brought forward is one for a railway line from St. Dizier to Vassy. During September there entered 2987 tons of special iron, and 1835 tons of castings, building purposes, against 3168 tons of iron and 1835 tons of castings in the corresponding month of 1863. In the first nine months of this year, the corresponding figures for Paris were 18,410 tons, and of castings 10,551 tons; the corresponding figures for first three quarters of 1863 were 19,137 tons of iron, and 12,383 tons of castings. Production of coke is making great progress in the neighbourhood of Valenciennes. Douai. Thus, 150 furnaces are in course of construction at the Enclus pit, at Douai, and nearly 100 are being constructed near the Gayant pit, on the Aniche concession.

The general tone of Belgian metallurgy has not varied for some time. The state of business, without being prosperous, is relatively good, especially having regard to the financial circumstances which prevail. Everything leads to the hope that an improvement will be witnessed, as numerous orders are received, and business will, probably, be further developed, in consequence of the railway enterprises which are commenced, or are on the point of being undertaken in Belgium and other parts of Europe. The Belgian journals are particularly anxious to enforce the necessity of maintaining the good quality of Belgian iron, as its reputation in this respect is one of the most powerful means of enabling it to sustain a struggle with competition. Regular employment is assured for some time to come to the various establishments, except the construction shops, which experience great difficulty in maintaining work on favourable terms. The incessant embarrassments of the money market react very unfavourably on a part of the clientele of these construction establishments, and hence the absence of activity continues. A rather sensible falling-off has been marked in the demand for merchants' iron, but this state of things is most prejudicial to other articles, especially rails and pig, the market for which is firmly sustained, and it is announced that the Espérance and Ongrès Companies have concluded a contract for 5000 tons, to be delivered next year, while quotations are per ton above those of 1863. As a matter of news, we may announce that a mass of agglomerates, abandoned some time since at Montigny-sur-Sambre, has just sold, in order that it may be converted into a rolling-mill. Mr. Wilmar, formerly director of the rolling-mill of MM. de Dorlodot, France, will be put at the head of the new company. The Charleroi forgers are devoting special attention to the production of new contracts for rails to diminishing the duration of the guarantee given. The *Revue Industrielle* says:—"When does an establishment which has conducted important affairs with conditions of guarantee for several years, when does such an establishment know its actual position? Account must be taken of several considerations, especially the increasing commercial movement on railways. Thus rails are everywhere more fatigued this year than they were last year, and they will be still more severely tried next year than this year. It results from this, that a rail which will resist one year will not resist another year. Then the weight of the rolling-stock is increased, so as to secure greater power of traction; and, finally, it may be asked, why rails are always well laid, although experience proves that a badly-laid rail is a quickly destroyed than one more carefully put down." It will be seen that good rails are not wanting to enable forgers to contend against the guarantee which many companies require of them. This is a question of capital expense for metallurgy. Large production of the blast-furnaces, although not quite so extensive as formerly, of forgers to lay in considerable supplies of minerals. This fact, coupled with scarcity of good minerals, has led to a certain revival in hydrates and oligistes. At Liège, the extraction pits have been deepened, and some excellent shafts have been opened. Refining pig for hard iron has been sold at 4s. 12s. to 4s. 14s. ditto for tender iron, 3s. 2s. to 3s. 4s.; speckled hard iron, 3s. 14s. to 3s. 16s.; fine-grained iron, 4s. to 4s. 2s.; steel pig, 3s. 16s.; casting pig, 1s. 4s. 6s.; ditto, 4s. 4s.; ditto, No. 3, 4s. 2s.; ditto, No. 4, 4s.; ditto, No. 5, 3s. 12s.; rolled iron (mixed), 7s. 4s.; ditto, No. 2, slightly hard, 7s. 16s.; ditto, No. 3, hard iron, 8s. ditto, No. 4, 8s. 16s.; rails, 6s. 16s. to 7s. 4s.; hammered iron, first-class, 10s. 12s. to 10s. 16s.; ditto, second-class, 11s. 16s. to 12s.; ditto, third-class, 13s. to 13s. 4s.; coal-made hammered iron, first-class, 14s. 8s.; ditto, second-class, 15s. 12s.; third-class, 16s. 8s.; double T-iron, 17s. 8s.; ditto, second-class, 18s. 8s.; ditto, third-class, 19s. 12s. to 10s. 16s.; ditto, fourth-class, 11s. 16s. to 12s. plates of commerce, 2 to 2½ millimetres thick, 9s. 12s. to 10s. 4s.; ditto, 1 to 1½ millimetres thick, 10s. 12s. to 10s. 16s.; ditto, finer, 11s. 8s. to 11s. 16s. per ton. The movement recently noted in the Belgian coal trade has become more strongly and eloquently indicated. The demand has assumed greater proportions, in consequence principally the first few frosts which have made themselves felt, and which indicate a precocious winter. It had been feared that these frosts were sufficiently severe to check traffic on the canals, but, happily, this has not been the case, and the deliveries with water continued as numerous as is permitted by the high rates at which boats are maintained on all the canals at Charleroi. The tonnage of the market is much satisfactory, prices are more firmly maintained, and stocks have almost everywhere appeared. From Liège the advices are also very favourable. From this basin, in great animation is reported in the demand, and a sustained firmness in prices. In Centre, the sale is also more active, but principally for the interior. At Mons, negotiations continue very feeble.

The Couillet Company has had a general meeting, to consider the renewal of the social contract, which expires July 1, 1865. The capital of the company, as it has been re-constituted, will be represented by 24,000 shares without designation of nominal value. The capital remains, nevertheless, at the amount at which it stands at present—480,000l.—at which 80,000l. represents the value of the shares of the Carabrier Colliery, at Châtelet, belonging to the Company. The division of profits will be made as follows:—10 per cent. to the reserve, 7 per cent. to the directors, and 83 per cent. to the shareholders. The general meeting of the proprietors will be held once a year at Brussels. The dividend of the John C. erill Company, to which reference was made in a recent impression, is at the rate of 5 p. cent. for 1863-4. The Société de la Nouvelle-Montagne will pay on Dec. 20, a dividend of 1s. 5s. per whole share, and 5s. per fifth share. The company known as the Charbonnages Du Centre de Gilly commenced the payment Nov. 1 of a dividend at the rate of 16s. per share in respect to the first half of the Châtelet-Blast-Furnaces, Ironworks, and Collieries Company will pay on Dec. 15, a dividend of 5s. per share in respect to the exercise 1863-4. The Vieille-Montagne Mines and Foundries Company has commenced the payment of the second half of the dividend of 1863, or 8s. per share. The dividend of the company carrying on the Douai steel manufactory, near Dreesden, for the exercise 1863-4 is fixed at 12 p. cent. The dividend for 1863-4 of the Berge Mines and Ironworks Company (Prussia) is fixed at 10 p. cent.; the dividend will become payable on Jan. 2, 1865. The dividend of the Friedr. Wilhelm-Hütte Mines and Ironworks Company for the exercise 1863-4 is fixed at 4 p. cent.; this company's works are at Mulheim, on the Ruhr, in Prussia.

The improvement noted in copper appears to be maintained on the foreign markets. At Paris quotations remain firmly supported at their former level, English making 91s.; Lake Superior, 104s.; rough Chilean, 86s. to 86s. 10s.; and Corocoro mineral, 88s. Chilean has recently found buyers at Havre, a lot of 125 tons, to be delivered in January, having been taken up by 86s. per ton, Paris conditions; there was, however, a little feebleness at the sale. The sale is noted of 10 tons of Chilean in bars at Havre at 84s. per ton. The German markets are also good; the amelioration noted of late in prices is everywhere making progress, and in the opinion of sellers an advance is certain. Quotations remain the same at Cologne. At Berlin there has been a slight amelioration in Russian Swedish. The demand is more animated at Hamburg, under the influence of the received from England, and, although prices have experienced no modification, the able symptoms are noticed on the Dutch markets; at the same time, the export of local, as on the Paris and German markets the article remains nominally at the same quotation, and does not provoke any purchases beyond those necessitated by the strict requirements of consumption. At Paris, Baux has made 103s., Detroit 101s., English 101s. The situation of the lead trade remains unchanged, scarcely any movement having presented itself in prices. At Rotterdam, Stobber and Eschewer have made 11s. 5s., while various marks of German have brought 11s. 5s. At Paris prices show no variation. As at this period of the year the arrivals at Hamburg are considerable, lead has been slightly rising at Hamburg, but, on the other hand, the demand. The Berlin market has remained unchanged; Cologne has been feeble, and slightly fallen. The tone of the zinc markets is more favourable; at the same time,

THAMES TUNNEL COMPANY.—Receipts for the week ending Nov. 19, 1881, No. 34: number of passengers, 18,399.

Further testimony in favour of **DR. LOOCOCK'S PULMONIC WAFERS**, from H. G. L. Walker, chemist, Leyland, Lancashire:—"We give a great many of your wafers, and they are very much thought of here." They give instant relief, and a rapid cure of asthma, consumption, coughs, and all disorders of the breath and lungs. They have a pleasant taste. Price 1s. 1/4d., 2s. 9d., and 4s. 6d. per box. Sold by all druggists.

128 TUNNEL COMPANY.—Receipts for the week ending Nov. 1901: number of passengers, 18,399.

A testimony in favour of Dr. LOCOCK'S PULMONIC WAFERS, from Walker, chemist, Leyland, Lancashire:—"We sell a great many of your they are very much thought of here." They give instant relief, and a rapid cure, consumption, coughs, and all disorders of the breath and lungs. They taste. Price is 1/4d., 2s. 9d., and 4s. 6d. per box. Sold by all druggists.

DARREN.—R. Williams, Nov. 24: I did not write yesterday as is my custom, being rather anxious to see a little more of the lode in the 15 west. The men who drove through from the shaft to meet the shaftmen did so on the north part of the lode, and since the communication was made they have been cutting out the south part, which produces ore of good quality; there are a few feet more standing between the two points but the appearances on either side show that this also will be good, which will give us

ently advanced thrust-out will be continued for intersection of the north part of the lode. In the 120 west, and west of Maynard's cross-cut, on the north part of the lode, the lode is 3½ feet wide, and for the present without ore. In the new, or Barkell's winze, sinking below the 120, on the north part of the lode, the lode is 5 feet wide, composed of gossan, mundic, prisan, capel, quartz, iron, and a little ore. In the 130 east the lode is become small (18 in. wide), and is unproductive. In the 77 east, west of Nordey's cross-cut, on the north part of the lode, the lode is improved, being at present

oxide of copper, malable copper, and yellow copper ore, saving work, and is altogether very promising; the driving is turned east on the course thereof, and as soon as sufficiently advanced the cross-cut will be continued for intersection of the north part of the lode. In the lode the ore is 35 feet wide, and for the present without ore. In the new, or Barkell's winze, sinking below the 130, on the north part of the lode, the lode is 5 feet wide, composed of gossan, mundic, prisan, capel, quartz, iron, and a little ore. In the 120 east the lode is become small (18 in. wide), and is unproductive. In the 77 east, west of Norton's cross-cut, on the north part of the lode, the lode is improved, being at present

in the 82 and 44 ft. level cross-cuts in without change. The new shaftmen are making good progress in cutting and squaring it down. Our tribute department is looking much the same as for some time past.

WHEEL KITTY.—(Uy Lafant).—William Williams, Nov. 21: North Branch Lode. The lode in the rise above the 140 is worth 51. per fm. The winze sinking below the 110 is about the same value; we expect in about a month more to hole.—Goward Lode. The stope over the 70, west of Rogers's shaft, is worth 601. per fm. There is no change to notice in any other part of the mine since last reported on.

WHEEL MARGERY.—R. James, W. Rogers, Nov. 24: At Wellesley's shaft, and also in the 70 west of ditto, the lode is without ore to value. At the American shaft the lode is poor at present. In the 132 west the lode is worth 61. per fm. No. 1 stope, in the worth 107. per fm.; No. 1 stope, in the back, is worth 161. per fm. No. 2 ditto is worth 187. per fathom. In the 122 west the lode is worth 107. per fm. No. 1 stope in the bottom is worth 107. per fm. No. 1 stope, in the back, is worth 67. per fathom. No. 2 ditto 77. per fathom. No. 3 ditto 87. per fm. In the 122 east the lode is worth 37. per fm. No. 1 stope, in the back, is worth 47. per fm. No. 2 ditto, in the back, is worth 87. per fm. In the 110 east the lode is worth 57. per fm. The stope in the back is worth 97. per fathom. No. 1 stope, in back of the 110 west, is worth 77. per fathom. No. 2 ditto is worth 77. per fm. In the 100 west the lode is poor. No. 1 stope, in the back, is worth 57. per fm.; No. 2 ditto, 67. per fm.; No. 3 ditto, 107. per fathom. No other change since our last report.

WHEEL MARY ANN.—P. Clymo, H. Hodge, J. Harris, J. Stevens, November 24: Clymo's shaft is sunk 454 fms. under the 200. The cross-cut at this level is extended east 3 fms. towards the lode. In the 130, north of Clymo's shaft, the lode is 2 ft. wide, worth 57. per fm. In the same level south it is 3½ ft. wide, worth 127. per fm. In the 180 north it is 1½ ft. wide, worth 67. per fm. In the same level south it is 4 ft. wide, worth 97. per fm. In the 170 south it is 3 ft. wide, worth 87. per fm. In the same level, north of Folland's shaft, it is 3 ft. wide. The stopes and pitches are just the same as last reported on.

WHEEL ROGER.—S. Mitchell, Nov. 21: The branch in the 40 is improving as we near the Trevauna lode—it is now saving work; this looks favourable for a good lode on reaching the junction. There is no change to notice at the new shaft, or in any other part of the mine.

WHEEL SIDNEY.—W. Edwards, Nov. 22: The following are the particulars of our tutwork setting for December month, together with the operations and appearances of the mine. The 60 end east to drive by four men, stented 3 fms., at 67. per fathom; the lode at present is rather disordered and unproductive. The 60 end west to drive by two men and two boys, stented 3 fms., at 47. 10s. per fm.; lode about 18 in. wide, producing 77. 10s. per fm. No. 2, by one man and one boy, 4 fms. stent, at 27. per fm. lode 3¼ ft. wide, worth 107. per fm. No. 3, by two men and two boys, 5 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 4, by two men and two boys, 6 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 5, by two men and two boys, 7 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 6, by two men and two boys, 8 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 7, by two men and two boys, 9 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 8, by two men and two boys, 10 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 9, by two men and two boys, 11 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 10, by two men and two boys, 12 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 11, by two men and two boys, 13 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 12, by two men and two boys, 14 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 13, by two men and two boys, 15 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 14, by two men and two boys, 16 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 15, by two men and two boys, 17 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 16, by two men and two boys, 18 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 17, by two men and two boys, 19 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 18, by two men and two boys, 20 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 19, by two men and two boys, 21 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 20, by two men and two boys, 22 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 21, by two men and two boys, 23 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 22, by two men and two boys, 24 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 23, by two men and two boys, 25 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 24, by two men and two boys, 26 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 25, by two men and two boys, 27 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 26, by two men and two boys, 28 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 27, by two men and two boys, 29 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 28, by two men and two boys, 30 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 29, by two men and two boys, 31 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 30, by two men and two boys, 32 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 31, by two men and two boys, 33 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 32, by two men and two boys, 34 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 33, by two men and two boys, 35 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 34, by two men and two boys, 36 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 35, by two men and two boys, 37 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 36, by two men and two boys, 38 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 37, by two men and two boys, 39 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 38, by two men and two boys, 40 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 39, by two men and two boys, 41 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 40, by two men and two boys, 42 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 41, by two men and two boys, 43 fms. stent, at 17. 10s. per fm. lode 3½ ft. wide, worth 37. 3s. per fm.; lode 4 ft. wide, worth 77. 7s. per fm. No. 42, by two men and two boys, 44

others trace only. We have parties of men on all these lodes, and I am fully confident that when we get the ground opened, which will not take very long, I shall be able to keep both mills supplied with quartz, and continually running night and day. We have now over 100 tons of quartz on hand, which will be largely increased by the time the mills are both ready for use, which the contractors have engaged shall be completed by the end of the present month.

CAPE COPPER.—October 19: Our latest advices from the mines report everything going on satisfactorily, and that the riding of ore to the Bay was being prosecuted vigorously. Mr. Phillips, writing from Hondeklip, under date of Oct. 7, reports 800 tons of ore on the beach, which would be shortly considerably increased by the addition of the large quantity on the way down from the Oukiep and Spectakel Mines; under these circumstances, we thought it desirable to engage another vessel, and we have effected a charter with Capt. Hineley, of the first-class barque *Hastings*, 425 tons register, to load a cargo of copper ore, from Hondeklip Bay to Swanes. The *Hercules* had been unfortunate in the weather off Hondeklip, up to Oct. 7, a swell having set in, which prevented the boats working, but we have little doubt she is now ready for sea. The superintendent writes from Namaqualand, under date Oct. 8:—Oukiep Mine: The inspection of this mine has been a most satisfactory one, as not only are all the works laid out with judgment, but the explorations in depth have revealed a finer mass of ore than the mine has ever shown, most of the ends are still opening fresh grey ground. The men sent from England give great satisfaction to Capt. Hineley, and appear to me as steady and able a lot of miners as could well be met with. The six lads have arrived and been put to work, and I have no doubt they will prove exceedingly useful. The levels driving into the large indication at Nabesep have not yet revealed any grey ground, and must yet be pushed forward for two or three months of sulphides, which, when dressed, will probably give about 200 tons of ore, averaging 28 per cent., so that already the whole cost of the works carrying on has been more than covered. It is proposed shortly to increase the staff at this mine, and Mr. Bennett, now acting as under-captain at Spectakel, will take charge of the party.—Spectakel, I regret to say, is not producing a large return of ore, but as much of that taken out is of good quality, profit continues to be made on the working. The floor of the main pit shows, however, a fair quantity of ore, and when the stopes are commenced more increase may be expected.

MINING NOTABILLIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

GOLD IN WALES.—Castell Carn Dochan returned, for the week ending Nov. 22, 3 ozs. 8 dwts. 16 grs. of Gold, from 21 cwts. of quartz.

EAST RUSSELL was visited on Wednesday by a large number of mine agents, who went underground to see the lode in the 130 fms. level. Five out of six expressed the opinion that a finer lode was never seen. It is much larger and much better than at the same distance from the shaft in the level above. Some distance has to be driven before they reach the rich course of ore which was found after the elvan had been passed. East Russell, as predicted by Mr. Josiah Hitchens, will be a great mine. Shareholders had better be careful how they are guided by brokers' agents' reports.

SOUTH CARADON.—We are glad to hear this property is steadily improving. Some three account-days since the manager expressed the pleasure he felt in stating that he had charged up all the heavy amounts for new materials, and in future their monthly cost would be lessened—a tangible proof of this was given in raising the dividend from 6s. to 7s., leaving a balance in favour of the mine of about £7000. At the meeting in September last there was an expectation of 11. bonds being given, instead of which the balance was raised to £2000; it is, therefore, taken for granted that at the meeting next week the pursuer will see the propriety of giving a bonus, instead of adding to the already heavy balance some 6000 more.

TRELYON CONSOLS.—The long-expected north and south lode has been cut in the 20 fms. level and west, and is worth from 10s. to 12s. per fathom.

DALE.—The shareholders in this mine seem likely to be soon rewarded for their patience and perseverance. The Pipe vein is yielding increasing quantities of lead and blende, and the rapid progress which the mine has made since the new shaft communicated with the Pipe vein will be seen from the following returns:—Sales in June, July, and August, 1864, 5177. 5s. 6d.; sales in September, 4667. 14s. 6d.; sales in October, 4667. 3s. 3d.; sales in November (computed), 7001. This mine is close to, and exactly like, the celebrated Eton Mine, from which the Duke of Devonshire derived a profit of two millions sterling.

GREAT EAST LOVELL.—The erection of the 50-inch cylinder engine is nearly completed, and operations will be immediately commenced upon the various lodes which are at present so productive in East Wheel Lovell.

CORNWALL GREAT CONSOLS.—The lode which we lately referred to, and which for the last 50 years has been such a source of mystery, from the complete failure of all attempts to discover it outside the precincts of Calstock parish churchyard, until within the last few months, has been intersected at the shaft sunk at this mine, and within 16 fathoms only from surface, has proved to be what everyone acquainted with the district expected it would turn out—a splendid champion lode, composed of rich yellow and black copper, in a soft peach and gossan, increasing in richness every foot they drive through it.

SOUTH GRYLLE.—The agent writes, on Tuesday, that "in taking down the lode to-day it yielded some rich copper ore, and hope it will continue to improve. I think we are driving over a piece of very valuable mineral ground, which will be laid open at deeper levels."

ROARING WATER.—This mine continues to improve as the operations extend. During the past week an additional discovery has been made north of Bush's shaft: a lode has been cut through 2 ft. wide, in whole ground, going west of the shaft, north of the part sunk on, containing grey and purple ore, gossan, and a small quantity of sulphate of barytes. This speaks well for Irish mining in this district, as these discoveries indicate the unmistakable probabilities of a rich mine.

PENDEEN CONSOLS.—A great improvement has lately taken place in this mine. At about 4 fathoms below the 94, where the lode is poor, the men noticed a vein of tin going through the granite; on following it they reached, at 5 feet from the lode, a bunch of tin, so rich that the men are working it on tribute at 1s. 6d. in 14. At the meeting the agents said they could pay the expenses of the mine, even at the present low price of tin; but should this rich bunch of tin prove to be a large one, they will immediately work at a profit. A good demand has sprung up for the shares, but there are no sellers at quoted prices.

NORTH JANE.—Considerable improvements have taken place. At the general meeting, just held, a credit balance of 3321. was carried forward, and there is 1401. worth of minerals sold to come to credit of next account. This property adjoins Wheal Jane, which is paying dividends. Shares should not be lost sight of. There are several mines selling for 20,000, and 30,000, not holding out so good prospects.

GREAT DARREN.—The ore ground in the back of the bottom level in Great Darren is yielding a very satisfactory return. The stopes extending over the driving show an excellent course of ore for a great width of lode, and every appearance indicates that the returns will be good, and the profits considerable. Had this ore been driven into as soon as the shaft was down there is no doubt that the sales of ore would have been greatly increased quite two months ago; unfortunately, the level was driven too far to the south for the ore, which has occasioned some loss of time in getting the mine into a profitable state of working.

WHEAL TRANNACK.—In the 40 fms. level end, going east, the lode is improving, producing some stones of grey ore; in the shaft the lode is from 18 in. to 2 ft. wide, producing saving work for tin, and looking very promising for an improvement shortly.

THE HAVAN SILVER-LEAD MINES are opening out remarkably well, and every point in operation is leaving a fair profit. Both the sales and the reserves are being regularly and considerably increased. Another level, the 20, will be commenced in the ore ground in about a month hence, and early next year the returns will be doubled, when it may be fairly expected the mine will enter the Dividend List.

EAST ABRAHAM.—This mine has been inspected by Capt. H. James, who reports, under date Nov. 24, that, taking all things into consideration, he thinks East Abraham a piece of mining ground of more than ordinary value.

EAST WHEAL VOR.—Since the great improvements in the adjoining mine, Great Wheel Vor, much attention has been given to East Wheel Vor, which recently has materially improved. The stratification is similar in character to that of Great Wheel Vor, and is situated in the same basin of killas; therefore, it is not improbable that another rich mine will be opened when the various points at present in operation are developed. Already tin has been discovered in the shaft, in character precisely similar to that in its rich neighbour.

EAST WHEAL LOVELL.—During the week this mine has considerably improved at various points, and has attracted great attention from parties in the district. The engine-shaft on the north lode, which has already reached the rich tin ground, will be completed by the beginning of Dec. It will be seen by the agents' report, which appears in another column, that the tin ground so frequently reported upon will soon be taken away at 1s. 6d. in 12, thus showing its great value. It has occupied a long time to make this new shaft, and fix in the proper working gear, but it was undertaken at the instance of Capt. Charles Thomas, and when completed the returns, which have been temporarily decreased, will be largely and permanently augmented. The south lode has improved in value from 60s. to 90s. per fathom. The Turnpike shaft lode has materially improved in driving west, which is a point of considerable importance.

WEATHER PREDICTIONS.

SIR.—M. De la Drome, of Paris, in writing to the French papers, states that the coasts of England and France are to be ravaged by one of the most fearful storms that has occurred during the present century, and that this disaster is to occur between Nov. 28 and Dec. 3. As this statement has appeared in the *Times*, the readers of the Journal would like to know something about this threatened calamity. Well, the order of the weather will be as follows, as far as England is concerned:—Strong winds and gales will occur on or about the following dates:—On the 29th inst., these winds will be of one day's duration; again, from the 3d to the 6th Dec., also on the 8th, and from the 10th to the 13th: in fact, we shall have some very rough weather next month. I have been particular as to giving the dates, for the information of our maritime interests.

26, Throgmorton-street, Nov. 22.

GEORGE SHEPHERD, C.E.,
Author of the "Climate of England."

SALE OF MINE SHARES BY AUCTION.—On Thursday Mr. T. P. Thomas held his periodical sale at Garroway's, which was well attended, and a very large amount of stock was sold. For many of the shares good prices were obtained, while others sold at low rates; but, for all, considerable competition was evinced.

IRON MANUFACTURE.—A monster bar of iron was drawn a few days since at Nicholls, Williams, and Co.'s Steam Forge Works, Tavistock. The bar was 27 ft. long and 11 in. square, the hammer used to draw it striking a blow of 33 tons.

MUNTZ, E. G., METAL BROKER,
32, PARADISE STREET, BIRMINGHAM.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, Nov. 25, 1864.

COPPER.				BRASS.			
Best selected	£ s. d.	£ s. d.	Par. lb.	Sheets	£ s. d.	£ s. d.	Par. lb.
Tough cake	92 0	0-95 0		Wire	94 0	0-95 0	
Tin	87 0	0-90 0		Tubes	94 0	0-95 0	
Burra Burra	93 0	0-95 0		FOREIGN STEEL.			
Copper wire	0 10	0-1 0 1/2		Swedish, in kegs (rolled)	15 10	0-15 16 0	
ditto tubs	0 11	0-1 1 1/2		(hammered)	16 0	0-18 0 0	
Sheeting & bolts	95 0	0-96 0		Do in fagots	17 0	0-18 0 0	
Bottoms	105 0	0-106 0		English, Spring	19 0	0-23 0 0	
Old (Exchange)	91 0	0-92 0		Bessemer's, Engineers Tool	4 0	0-4 0 0	
IRON.				Spindle	30 0	0-30 0 0	
Bars Welsh, in London	7 15	0-7 15 0		QUICKSILVER (per bottle)	8 0	0-8 0 0	
Do, to arrive	7 15	0-7 15 0		SPELT.			
Salt rods	8 15	0-8 15 0		Foreign	21 10	0-21 15 0	
Do Stafford, in London	9 7	0-10 10 0		To arrive	21 15	0-21 15 0	
Bars	9 0	0-9 10 0		SING.			
Do ditto	10 0	0-11 0 0		In sheets	25 0	0-25 0 0	
Sheets, single	11 0	0-12 0 0		TIN.			
No. 1, in Wales	4 10	0-4 10 0		English, blocks	101 0	0-101 0 0	
Refined metal, ditto	4 0	0-4 0 0		Do, in barrels	102 0	0-102 0 0	
Bars, common, ditto	7 0	0-7 10 0		Do, refined	106 0	0-106 0 0	
Do, merch., Tyne or Tees	7 15	0-7 15 0		Straits	94 0	0-94 10 0	
Do, railway, in Wales	7 0	0-7 10 0		TIN-PLATES.			
Do, Sweden, in London	11 0	0-11 0 0		IC Charcoal, 1st qua. p. bx.	1 8-0	1-11 0	
To arrive	11 10	0-11 10 0		IX Ditto 1st quality	1 14-0	1-17 0	
Pig, No. 1, in Clyde	2 11	0-2 17 6		IX Ditto 2d quality	1 6-0	1-8 0	
Do, f.o.b. Tyne or Tees	2 16	0-2 18 0		IX Ditto 3d quality	1 12-0	1-14 0	
Ditto, f.o.b. ditto	2 15	0-2 15 0		IX Coke	1 3-0	1-5 0	
Railway chairs	5 10	0-5 15 0		IX Ditto	1 3-0	1-11 0	
" spikes	11 0	0-12 0 0		Canada plates	13 10	0-13 10 0	
LEAD.				In London; 20s. less at the works.			
English Pig, ordy, soft	20 6	0-20 6 0		Yellow Metal Sheathing	p. lb. 8 1/2 d.		
Ditto (WB)	22 5	0-22 5 0		Sheets	p. lb. 8 1/2 d.		
Ditto sheet	21 0	0-21 5 0		Indian Charcoal Pigs	7 0-0	7 10 0	
Ditto rod	22 0	0-22 0 0		In London			
Ditto white	26 0	0-26 5 0					
Ditto patent shot	23 0	0-23 10 0					
Spanish	19 10	0-19 10 0					

* At the works, 1s. to 1s. 6d. per box less.

REMARKS.—The continued ease in the Money Market has caused the directors of the Bank of England, at their meeting on Thursday last, again to lower the rate of discount, to 7 per cent. This movement had been fully expected, and, indeed, it could hardly, with any propriety, have been delayed any longer. We may now fairly hope that this reduction will soon be followed by even lower rates, and that by the close of the year we shall again see money at its average rate of interest. The present reduction will, no doubt, be followed by a corresponding improvement in commercial affairs, and by a restoration of confidence, which has been so severely shaken by the late failures, as we may now reasonably consider the crisis, which has extended over so unusually long a period, is over, and may begin to look forward to a brighter and more cheering prospect than has been exhibited in the commercial world for some time. This movement will also be very beneficial to the Metal Market generally, and will greatly tend to an improvement in prices in some metals, and will be calculated to induce buyers to give out orders which have been kept back during the late depression; and as accounts from India are still continuing favourable, we may hope that a healthy and flourishing trade in metals will soon spring up, which may in some measure compensate for the great lack of business which has been manifested in the metal trade for some months past.

COPPER.—The market still continues steady, with a tendency to increased firmness, especially since the reduction in the Bank rate, and it is by no means improbable that an advance in official rates may soon occur.

IRON.—In Staffordshire a slight improvement has taken place in the demand for iron since the money market has become easier. Shipbuilding and galvanising sheets, and angle iron, are especially in good demand, but the bar and hoop mills are not so busy, and the orders on hand are very small. The American demand has almost ceased, and with the increasing premium on gold its speedy revival is not anticipated. The colliers are now generally at work, as far as there is employment for them; but, owing to the contracts entered into with other districts, and the large number of blast-furnaces out of operation, the demand is not sufficient to keep all the collieries in full work. In Welsh the iron trade retains its vitality, and both rails and bars are in good demand. Puddled bars are less enquired for, while iron for shipbuilding purposes is in brisk request, and there is every probability of a large increase in the demand. From America there is no material change, and the shipments to New York are only about half the quantity sent out twelve months since. In Swedish iron there is no alteration to notice. In Scotch pig-iron, although an extensive business has been done during the week, yet prices have not improved. During the greater part of the week the prices remained nearly the same as at the close of last week—51s. 3d. cash, and 51s. 4 1/2d. one month; however, about the middle of the week a concession was made by holders, and prices fell to 51s. cash; and, notwithstanding the reduction in the Bank rate, no rally took place. The last advices from Glasgow state that a moderate business transpired at 51s. cash, and 51s. 1 1/2d. fourteen days; and at these rates sellers remained at the close.

LEAD.—There is rather more enquiry, and prices have improved about 2s. 6d. per ton. Prices may now be quoted at 20s. 2s. 6d. for common English pig, 20s. 7s. 6d. for LB, and 22s. 5s. for WB; and, altogether, the market has assumed a better appearance.

TIN.—There has been but a very moderate amount of business done during the week. Straits has rather declined in price, transactions having taken place at 94s. 10s. cash, and more recently small parcels have changed hands at 94s. Banca has again been sold at 95s. 10s. As the importations of Straits are large, an improvement in prices can hardly be looked for at present.

SPELT.—The market remains exceedingly quiet, but prices are steady, at 21s. 10s. to 21s. 15s. cash.

STEEL remains without alteration.

TIN-PLATES.—There is little doing, and the charcoal makers still complain that orders are very scarce—several of the works are only partially employed.

QUICKSILVER remains firm, at the quotation.

GLASGOW, NOV. 24.—The market has been quiet. Business has been done at 50s. 10 1/2d. and 51s. cash. At the close there were sellers at 51s. cash; buyers, 50s. 10 1/2d. No. 1 g.m.b., 52s.; No. 3, 51s. 3d.

MIDDLEBURY, NOV. 24.—Our Pig-iron Market has been very quiet since our last, with no alteration in price. To-day warrants are offered at 47s. 6d. cash, and 49s. three months; buyers, 6d. per ton less. No. 1, 50s.; No. 3, 47s.; No. 4, 46s. The orders for consumption are large, and buyers seem anxious to contract for forward delivery.

BOSTON, NOV. 7.—In English Cannel Coal there have been further sales at \$26 per ton. Picton and Sydney are quiet, and cargo prices are nominally \$12-50 to \$13 per ton. Anthracite has been in steady retail demand at \$13 to \$14 per ton. The market is quite firm for Pig-iron, and prices have advanced to \$65 per ton cash, with sales of Gatscherrie and other kinds. No. 1 American pig-iron is scarce, and the sales have been in small lots at \$62-50 to \$67-50 per ton cash. Bar and sheet iron are held firm, but have been quiet.

NEW YORK, NOV. 9.—The demand for Domestic Coal has been good, but at irregular prices; the arrivals have been large, and have added greatly to the stock, which is considerably above that of last year. The advanced prices asked by the leading companies check business. American pig-iron has been only moderately active, but prices have advanced. Sales of 40,000 to 50,000 lbs. Lake and Baltimore, at 49c. to 50c., closing firm. New sheathing and yellow metal are also firmly held, but the business has been only limited. We quote at 61c. for the former and 50c. for the latter. The market for Pig-iron has been only moderately active; but, with the advance in gold, prices are better, and close very firm. American sheet is in demand, and firmly held.

PHILADELPHIA, NOV. 11.—For Iron there is more enquiry, and a better feeling in the trade generally; but there is not much doing in the way of sales, owing to the firmness of the makers, who are asking an advance on previous quotations, with very reduced stocks of anthracite pig-metal, especially foundry, which is held for higher prices, and scarce at \$60 to \$62, cash. Forge is worth \$50 to \$55, and Scotch pig \$63 to \$65 per ton. Blooms and boiler-plates are steady, with moderate sales, and manufactured iron in fair demand at fully former figures. At Pittsburg the market has exhibited an improvement. The sales were more liberal. The aggregate will reach 210 tons of the various descriptions. Copper is held with immense firmness, and is more active, with large sales of ingot. For manufactured the enquiry is better, and prices are well maintained, with free shipments South, for the supply of the Government fleet. The scarcity of suitable vessels, however, checks business. The receipts are moderate, and the stocks generally are light for the season.—U. S. Railroad and Mining Register.

COAL MARKET.—The arrivals during the entire week only amounted to 51 ships, the greater part of which were steamers with gas and contract coal. The market for household coal is without alteration, the few car-

goes daily being taken off at previous quotations. Hartley coals have been less active, and submitted to a reduction of 6d. per ton. Hutton Wallsend, 23s.; Hartlepool Wallsend, 23s.; Eden Main, 22s.; Tunstall Wallsend, 21s. 6d.; Pittington Wallsend, 20s.; Cowpen Hartley, 19s.; 1 cargo unsold; 165 ships at sea.

THE COAL TRADE IN FRANCE.—It appears that at the commencement of Nov., 1864, the following pits were in activity in the Pas-de-Calais:—Anchy-au-Bois, 2; Bruay, 2; Bully-Grenay, 3; Carvin, 2; Courrières, 3; Cauchy-la-Tour, 1; Douges, Hemin-Liéard, 2; Douvrian, 1; Ferlay, 2; Lens, 4; Liévin, 1; Lys-Supérieure, 1; Marles, 1; Meurchin, 1; Vendin, 1; and Vicoigne and Neux, 2; total, 29. Three pits have been abandoned, having been established on conditions on which it was impossible to work them successfully. The Pas-de-Calais may be said to have commenced its industrial and mining existence in 1849; and since that year 32 collieries have thus been developed in the department. This may appear at first sight a considerable result, and no doubt it is, but when compared with the advance made in corresponding matters by other countries, the progress of coal mining industry in the department is relatively feeble. Thus, in the Charleroi basin, which is not above one-third the size of that of the Pas-de-Calais, 44 collieries were created in four years, while the basin of the Ruhr, which dates from nearly the same period as that of the Pas-de-Calais—from 1850—now comprises 150 pits. The relatively slow progress of the Pas-de-Calais is attributed to two causes—first, the disinclination of French capitalists and operatives to mining enterprise and industry; and, secondly, the imperfect communications which exist by water and by railway for the delivery of the products obtained. Even now coal from the Northumberland basin, notwithstanding the great distance which it has to be carried, competes successfully on some points of the French littoral with coal obtained from the Pas-de-Calais.

The rate of discount has been lowered this week to 7 per cent., but the measure had been so fully anticipated in the money and other markets that upon its announcement on Thursday morning it had very little effect on prices; in fact, shares went rather flatter than otherwise. In the MINING MARKET dulness still reigns, and there is very little change to notice or report upon. Wheal Grenville, 5 1/2 to 5 3/4; at the meeting the accounts showed a cash balance in hand of 643s. 12s. 11d., and assets over liabilities, after charging up an extra month's cost (of upwards of 9000.), to the end of October of 36s. 12s. 1d. During the quarter the extra cost for buildings, &c., which add to the plant, has been 257s., besides timber, and about 42 tons of tin have been sold, and as the price has declined 15s. per ton below the price the mine at first obtained, the difference to the company has been 630s. on the quarter, and which would otherwise have been profit. The mine altogether looks well, and both the 110 and 120, the most important in the mine, show signs of good improvement. East Grenville shares have been flatter, and leave off 5 1/2 to 5 3/4; the 75 is gradually improving, and coming into ore. East Caradon, 18 1/2 to 19, and firmer. East Lovell shares have not been so firm, though a large business has been done, and they leave off 14 1/2 to 15 1/2. East Basset, 52 1/2 to 55; Clifford Amalgamated, 34 to 35; East Carn Brea, 6 1/2 to 6 3/4. North Roskear, 17 to 18; we have received one or two communications reflecting upon the management of this mine, more particularly in reference to the delay in the completion of the machinery, whereby heavy calls have had to be made upon the shareholders. One correspondent considers that when engineers enter into specific contracts they should be compelled by managers to complete them within the specified time, or be made responsible. In the case of the calciner at North Roskear, the agents themselves, we believe, have complained very much that it had not been delivered for months after it was due on the mine, and in consequence the tin could not be returned. Drake Walls, 8 to 8 1/2. Great Laxey shares in demand, and advanced to 18, 19.

East Russell, 4 1/2 to 5; in the 130 cross-cut the north part of the lode has been cut into 63 feet, and is saving work for copper ore of good quality, with every appearance of being near a rich lode. The cross-cut will be continued north for the rest of the lode, when the level has been driven east a short distance. North Chiverton, 2 to 2 1/2; the agent states that the samplings will be increased, and that in a few months the returns will fully meet the costs. This, as we have said before, is considered the most promising mine in the Chiverton district, after West Chiverton. Mr. Marchison has been appointed secretary in place of the late Mr. Dunsford. East Wheel Vor, 37s. 6d. to 42s. 6d.; there are good stones of tin in the engine-shaft. West Vor, 1 1/2 to 2; at the general meeting, held on Monday, the accounts showed a credit balance of 1150s. 13s., after paying for the new 50-inch engine, and the costs to the end of September. The shaft has been sunk about 25 fathoms from surface, and at about 20 fathoms deeper they calculate to intersect the great elvan, where rich bunches of tin are reasonably expected, from the fact that in the adjoining mine—Great Wheel Fortune—such were the results of the intersections of the same lode and elvan. This point will be reached in about seven months. Great East Lovell, 2 1/2 to 3; this mine adjoins East Lovell, and is promising. Wheal Arthur, 5s. to 10s.; at the meeting, on Monday, the debit balance was 880s. 10s. 9d., to meet which a call of 3s. per 5790th share was made, and 2s. per share towards meeting future expenditure. The lode in the stope in the back of the 50 fathom level is worth 3 tons of copper ore per fathom. The great point in this mine is the sinking of the north engine-shaft to meet with the junction of the north and Watson's lodes, which is expected to be accomplished by the end of February next. The ground in the bottom of the shaft consists of killas, mixed with spar, capel, and mundie, with a quantity of water coming out from the north side. South Darren, 1 1/2 to 1 3/4; the general meeting will be held on Monday, when a good report is looked for. Prosper United, 2 1/2 to 3; the mine is looking very well, and when the new engine is at work at Hand's shaft it is said that the returns will be much increased. St. Ives Wheal Allen shares nominally 1 to 2; this mine is much improved lately, and the returns are increasing, and even at the present price of tin will, it is stated, soon meet the cost if the present progress continues. The mine adjoins St. Ives Consols, and is under the same manager. The number of shares is only 900, upon which about 15s. each has been paid. Great Wheel Vor, 33 to 34; Hallenbeagle, 3 1/2 to 3 3/4; Lady Bertha, 3 1/2 to 4; Marke Valley shares have been in demand at 4 1/2 to 5 1/2; Nangiles, 20 to 22; Prince of Wales, 1 1/2 to 2; Providence Mines, 36 to 38. Kelly Bray, 1 1/2 to 2; the improvement in this mine holds good; the lode is worth 20s. per fathom; the sampling will be 100 tons of ore—80 tons of rich quality—giving a profit on the two months' working. Wheal Harriett shares have been enquired for at 20s. to 25s.; there are indications of another bunch of tin in the 115 west; the end is now worth 10s. per fathom, with a very promising appearance; and from the well-known character of the lode good results may be anticipated; when they had a good bunch of tin, a year or two ago, shares rose to 6s. each. At East Rosewarne, King's shaft is worth 24s. per fm.; the 75 west, 12s. per fm.; the 65 west of King's, 13s. per fm. At Wheal Kitty (St. Agnes) the 65 east is worth 12s. per fm.; west, 22s. per fm.

Great Wheel Busy is said to have greatly improved in the bottom levels. The 140, west of the cross-cut, is valued at 12s. per fathom; the 140 east, 25s. per fathom; the 140 west, 30s. per fathom; the 140 east of Offord's, 35s. per fathom. A winze below the 90, on a lode of tin, is valued from 45s. to 50s. per fathom. South Condurrow, 1 1/2 to 1 3/4; South Lovell, 1 1/2 to 2; Tincroft, 16 1/2 to 17; Vale of Towry, 4s. to 6s.; West Caradon, 6 to 7. North Shepherds shares have not sustained the late rise, for after reaching nearly 5 they declined, and leave off 2 1/2 to 2 3/4; there is no alteration that we hear of in the state of the mine. West Chiverton, 6 1/2 to 6 3/4; West Sharp Tor, 50 to 55; Wentworth Consols, 7 1/2 to 8 1/2; Wheal Chiverton, 6 1/2 to 7; Wheal Crebor, 35s. to 37s. 6d.; Wheal Trellawny, 19 to 20. St. Day United shares have been rather largely dealt in

directors a dividend of 10% per share (10,240L) was declared, leaving 25,888L 7s. 2d. in hand.

On the Stock Exchange a good business has been done in Mining Shares during the week. The following quotations were officially recorded in British Mining Shares:—Chiverton, 6½; East Basset, 52, 54; East Grenville, 6½; East Lovell, 16½; Great Laxey, 16½; Great Wheal Vor, 33½, 33½; Nangile, 18½; Tincroft, 16½; Clifford, 33½; East Caradon, 19, 18½; West Seton, 210; Wheal Seton, 199½. In Colonial Mining Shares the prices were:—Yudanamutana, 1½, 1½; Cape, 10½, 10, 10½; Port Phillip, 1½; Scottish Australian, 1½, 1½; Foreign Mining Shares the prices were:—Montes Aureos, 1½, 1½; St. John del Rey, 33½, 33½, 33, 34; United Mexican, 5½, 5½, 5½; East del Rey, 1½; Alamillo, 1½, 1½; Linares, 5½; Don Pedro, 1½, 1½.

The Imperial Mercantile Credit Association invite (by advertisement, which will be found in another column) subscriptions for 8 per cent. debentures of the Atlantic and Great Western Railway. The amount of the issue is to be 2,800,000L, of which 1,200,000L has already been applied for. The price of the debentures is 90% per cent.; they are to be redeemed at the end of three years at par; and they bear interest at 8 per cent. per annum, the payment of which is guaranteed for the three years by the Consolidated Bank of London. These terms, coupled with the fact that the 90% is payable in seven instalments, extending to May 15 next, give a return on an investment for the three years of nearly 12½ per cent. per annum. The return of the principal is secured by the deposit at the Bank of England, in the names of Messrs. Samuel Gurney, M.P., John P. Kennedy, and Charles Moxley (as trustees), of bonds and shares amounting at the usual exchange to 4,230,493L. The railway comprises 385 miles of main line and 167 miles of extension, passes three Free States, far removed from the war, and is now finished, completing an unbroken communication of 1200 miles between New York and St. Louis. The traffic has hitherto far exceeded every anticipation, and the present operation is preliminary to an amalgamation of the entire line under one management. The statistics of the progress of general trade in the districts traversed by the line are highly favourable to its prospects, and it is mentioned that, as respects petroleum, in the carriage of which this railway has practically the monopoly, the production in 1859 was 750 barrels of 40 gallons, whilst it increased in the following year to 50,000 barrels, and by 1863 had reached 2,220,000 barrels. The Cleveland branch of the Atlantic and Great Western is engaged to the full extent of its capacity in the carriage of iron, the ore from the mines of Lake Superior, and in shipping coals in return vessels. These mines produced in 1859—of iron ore, 65,679 tons, and of copper 6041 tons; and in 1863, of iron ore 280,000 tons, and of copper 10,000 tons. Sir Morton Peto, M.P., has reported favourably upon the substantial construction of the line.

The Governor and Company of Copper Miners in England have given the necessary parliamentary notices of application for the Act to enable them to carry out the resolutions of the meeting reported in the *Mining Journal* of Aug. 13, for cancelling all but one class of shares. The Port Talbot Company has also given notices in which the Copper Miners' Company are interested.

"Henry Briggs, Son, and Company" is to be incorporated under the Joint-stock Companies Act, 1862, with limited liability, and a capital of 135,000L, in shares of 15L each, for the purpose of working the collieries of the firm of that name, at Whitwood and Methley, near Normanton, Yorkshire, comprising about 2600 acres, and now producing from 5000 to 6000 tons of coal weekly. The prospectus states that the primary object of the undertaking is to secure the co-operation of all those connected with the collieries, either as managers, workpeople, or customers, and thus prevent those frequent trade disputes which now occur. The coals worked are the Stanley Main, 6 ft.; and the Haigh Moor, 4 ft. 6 in. thick; underlying these is the Middleton Main seam, about 5 ft. thick, which may hereafter provide a field for extended operations for 50 years to come. It is estimated that the valuation will not exceed 85,000L for the entire property, including 3500L for the coal not yet worked. The constitution of the undertaking appears an ingenious combination of the joint-stock and friendly society principles, so that it made the interest of all employed to promote the welfare of the enterprise as much as the independent shareholders. The existing firm retain two-thirds of the shares, and the remainder will be allotted by preference; first to the workmen, then to the customers of the colliery, and, lastly, to the general public. The prospectus will be found in another column.

At Redruth Ticking, on Thursday, 3247 tons of ore were sold, realising 15,789L 0s. 6d. The particulars of the sale were:—Average standard, 125L 19s.; average produce, 6; average price per ton, 4L 17s. 6d.; quantity of fine copper, 196 tons 10 cwt. The following are the particulars:—

Date.	Tons.	Standard.	Produce.	Price per ton.	Per unit.	Ore copper.
Oct. 27	3338	112	9	5½	4L 15 0	277 10 0
Nov. 3	3098	121	10	6½	5 0	80 0
10	2575	121	10	6½	5 0	79 4 0
17	5111	134	11	5	3 19 0	79 12 0
24	3247	125	10	6	4 17 6	80 7 6

Compared with last week's sale, the advance has been in the standard 5s., and in the price per ton of ore about 4d. Compared with the corresponding sale of last month, the advance has been in the standard 2L 15s., and in the price per ton of ore about 3s. 6d.

The directors of the Devonshire Great Consolidated Copper Mining Company, at their board meeting held yesterday, declared a dividend of 10,240L, being 1% per share, arising from profits on sales of copper ore sampled in the months of July and August last. After the payment of the same there remains in hand a balance of 25,888L 7s. 2d. in cash, ore bills not at maturity, and reserve fund applicable to the general purposes of the company.

At the West Basset Mine meeting, on Wednesday (Mr. W. A. Thomas in the chair), the accounts showed—Balance carried over from last meeting, 277L 10s. 6d.; 2L 17s. 6d.; copper ore sold, 4412L 15s. 8d.; stores sold, 1L; advance on tribute, 300L; the sold, 213L 2s. 4d.—5888L 1s. 7d.—Cost for Aug. and Sept., 3189L 19s. 6d.; royalty (less income tax), 3027L 18s.; advance on tribute, 300L; boundary cost, 32L 12s. 6d.; sundries, 17L 1s. 4d.; balance, 1965L 10s. 3d. A dividend of 1500L (5s. per share) was declared, and 465L 10s. 3d., the balance and the proceeds of sales of ore not at maturity, amounting to 4534L 2s. 8d.—5000L 2s. 11d., applicable to the general purposes of the adventure, were carried over to the next account. The report stated that some valuable tribute ground was being opened, and that the prospects of the mine had improved during the last two months. The Chairman stated the collector had reported that the draft of the appeal to the House of Lords against the recent decision of the Court of Error had been prepared and settled by counsel, and would be lodged very shortly.

At the Wheal Owles meeting, on Nov. 18, the accounts showed a credit balance of 1448L 0s. 11d. Work performed during the quarter:—153 fms. 0 ft. 3 in. in levels; and 37 fms. 2 ft. 6 in. sunk in shafts and winzes. There are 30 paces stopping on tubwork for tin, and 36 paces on tribute.

At the Cargill Mine meeting, on Monday, the accounts showed a credit balance of 1060L 17s. 10d. On Nov. 18, they sold 51 tons of lead ore, at 18L 15s. per ton amounting to 935L 5s., which is the first sale for the credit of the next account.

At North Jane Mine meeting, on Nov. 17 (Mr. T. Bell in the chair), the accounts for the three months showed a credit balance of 332L 7s. 1d. The agents' report was considered very satisfactory. The mine has greatly improved, and the prospects for further and speedy improvement look promising. They have on the floors 140L worth of minerals, that are sold to come to credit of next account.

At Wheal Par meeting, on Nov. 17, the accounts showed a debit balance of 666L 17s. A call of 10s. per share was made. The salary of Captain Treacy was raised 1L 1s. per month. Capt. Treacy and Beard, in their report, say—"Seeing the improvement of every lode in depth, and considering that the favourable ground gives every indication of extending as we go down, we purpose making immediate arrangements for resuming the sinking of the engine-shaft for another level. We have sold during the quarter 9 tons 11 cwt. 1 qr. 28 lbs. of black tin, for 603L 7s. 1d."

At the North Chiverton Mine meeting, on Nov. 19 (Mr. E. Cooke in the chair), Mr. J. H. Marchison was appointed secretary in the room of Mr. Dunford, deceased. Details in another column.

At the West Wheal Vor meeting, on Monday (Mr. J. Schofield in the chair), the accounts made up to the end of September showed a credit balance of 1180L. Details in another column.

At the East Margaret Mine meeting, on Nov. 15, the accounts showed a debit balance of 823L 4s. 1d. A call of 15s. per share was made. Capt. James and Birch, in their report, say—"Our tubwork operations employ 36 men. We have also 20 paces employing 44 men, at an average of 18s. 4d. in 1L: total, 80 men underground. Our number of tributaries are increasing, from which we expect an increase of tin. There are thousands of fathoms of ground laid open that would work at a high tribute if we could get tributaries to come in. We expect 18 tons of tin for the next quarter, with some reduction of cost."

At Great Work meeting, on Tuesday, the accounts showed a credit balance of 600L. The profit on the three months' working was 63L.

At New Crow Hill Mine meeting, on Wednesday (Mr. W. S. Sutton in the chair), the accounts showed a cash balance of 111L 1s. The liabilities exceeded the assets by 335L 18s. 1d. A call of 1s. per share was made. The agents report that there are 12 men on tribute, at 30s. per ton for ore; the lode is 4 ft. wide, averaging 7 cwt. of ore per fathom.

At South Tolgus meeting, on Tuesday, the accounts showed a credit balance of 60L. The profit on the two months' working was 105L.

At South Carn Brea Mine meeting, on Tuesday, the accounts showed a debit balance of 841L 16s. A call of 4s. per share was made. The outstanding calls amount to 234L 12s. 6d. Capt. I. Richards says—"The 11s. cost of the flat-rod shaft, continues to open up profitable ground, and although the different points of operation are not rich, they are very promising; and judging from these circumstances, I think I am fairly justified in calculating upon greater productiveness at an increased depth, and I venture again to express my opinion that this will be the case."

At St. Ives Consols meeting, on Nov. 15, the accounts showed a credit balance of 14L.

At the Wheal Norris meeting, on Nov. 18 (Mr. T. B. Simpson in the chair), the accounts showed a debit balance of 1087L 6s. A call of 3s. per share was made. Capt. John Andrews reported upon the various points of operation.

At the Gurney Mine meeting, on Wednesday, the accounts for the four months ending Sept. 30 last showed a debit balance of 497L 16s. 9d. The bankers' pass-book showed a cash balance of 1314L 11s. 11d. A call of 5s. 4d. per share was made. The purser reported that his negotiations with Mr. Mostyn for the sale of the mine had terminated. The report of the agents was read, and from the recent improvement in the mine it was unanimously resolved that the operations be continued in accordance with their recommendation; and that Capt. Tredinnick, of the Great Work Mine, be directed to inspect the mine, and that a copy of his report, together with that of the agents, be circulated amongst the shareholders. Application is to be made to Mr. Gregor, the lord, for a remission of the dues.

At South Hingston Mine meeting, on Tuesday, the accounts showed a debit balance of 125L. A call of 3s. per share was made, and it was resolved to suspend all operations, owing to the present state of the times.

At Wheal Emily Henrietta meeting, on Monday, the accounts for the two months showed a loss of 473L 19s. 4d., and a call of 10s. per share was made. The meeting was adjourned to Dec. 5, for the purpose of receiving the report of Captain Daw and Mr. Thomas Angove relative to the working of the south ground.

At Wheal Curtis meeting, on Tuesday, the accounts showed a debit balance of 1250L. A call of 25s. per share was made.

At the Botelet Mine meeting, on Nov. 18, the accounts showed a debit balance of 163L 11s. 9d. A call of 7s. 6d. per share was made. Capt. Trevillon says—"To carry on the property with every other cost of the mine, will incur an outlay of not less than 150L monthly, against which I hope to raise 50L worth of lead per month. Our parcel of lead (10 tons) sold to Messrs. Treacy, on Nov. 9, fetched 17L 8s. 6d. per ton."

At the Wheal Arthur meeting, on Monday (Mr. Peter Watson in the chair), the accounts showed a debit balance of 880L 10s. 9d. A call of 5s. per share was made. Details in another column.

At East Chiverton Mine meeting, on Nov. 19 (Mr. W. Gundry in the chair), the accounts to Nov. 19 showed a debit balance of 555L 12s. 7d. A call of 7s. 6d. per share was made. Capt. James Juleff and James Nancarrow reported upon the various points of operation.

At Vigra and Clogau Mining Company meeting, to be held on Monday, the accounts for the nine months ending Sept. 30 show a credit balance of 5267L 3s. 8d. A call of 1L per share is made. The directors propose an alteration in the constitution of the company. (It is at present in 4200 shares, of 5L each.) It is proposed to form a company with 100,000L capital, in shares of 1L each; to give 84,000L to the old shareholders—20 new shares for each one old—to give 5000L for the West Clogau property, and to allot the remaining shares to present holders at par. During the nine months comprised in the accounts nearly 124½ tons of quartz were crushed, yielding 224½ ozs. gold—1 oz. 16 dwts. per ton average. This sold for 5097L 19s. 6d. Mr. Arthur Dean reported upon the various points of operation. In consequence of the discoveries lately made the future property of the enterprise is, in his opinion, much more firmly established now than at any previous period.

At the Welsh Gold Mining Company Meeting, on Tuesday, the accounts for the year ending Sept. 30 will show a debit balance of 4533L 9s. The directors' report states that, under the guidance of their present experienced engineer, Mr. A. Dean, and with the view to work large quantities, they have not hesitated to purchase an engine of 120-horse power, and to order the necessary additional machinery (capable of working 150 tons per day). This engine is at the mine, and the additional castings have arrived at the port; and as quickly as circumstances will permit the same will be erected, and the company proceed to work on a large scale. In the meantime, as fast as houses can be built and made habitable for labour, men are being put into the mine to lay it open, to give an increased supply of mineral without interruption. Mr. Arthur Dean reports that the prospects of the enterprise are very cheering, and with the completion of the machinery a very prosperous era will commence for the company.

At the East India Coal Company meeting, on Monday (Mr. J. Wilde in the chair), a resolution was unanimously passed, increasing the capital of the company to the extent of 20,000L, divided into 2000 shares of 10L each, having a preference and guarantee dividend out of profits at the rate of 10 per cent. per annum on the amount from time to time paid-up; but such shares to be redeemable, at the option of the directors, at any time, upon giving six calendar months' notice by public advertisement. A deposit to be paid of not less than 2L per share, and the shares to be offered *pro rata* in the first instance to the shareholders. Details in another column.

The Russian Government have completed the public line of telegraph throughout European Russia and Siberia in Asiatic Russia to Khabarka, the frontier town of China. Khabarka lies to the north-west of Peking, and is distant about 750 miles from that city. It is, therefore, possible to send a communication from London to the capital of China in about four days. The line from St. Petersburg to Khabarka extends over a distance of 7000 or 8000 miles, and its completion so far is an event of great importance, not only to European merchants, but also to the different Governments whose Ministers reside in the Celestial City.

MR. WILLIAM MARLBOROUGH, 1, GREAT ST. HELEN'S, BISHOPSGATE STREET, LONDON, E.C. (late of 48, Threadneedle-street), STOCK AND SHAREDEALER. (ESTABLISHED TEN YEARS.)

FOR SALE:—25 Bedol-Aur, 10s. 6d.; 10 East Laxey; 5 Great Laxey; 50 Great South Chiverton (offer wanted); 15 Bryntall, £2 13s. 9d.; 90 North Miners, 3s. 3d.; 10 North Shepherds, £2½; 30 Lady Bertha, 9s. 9d.; 10 Calvadack, 17s. 6d.; 5 East Lovell, £15½; 50 Crebor, 36s. 9d.; 10 Long Rake, 31s. 9d.; 30 Great Retallack, 2s. 3d.; 20 Wheal Harriet, 18s. 3d.; 20 Kelly Bray, 11s. 3d.; 2 Buller, £11 18s. 9d.; 10 East Russell, £1 16s. 8d.; 70 Wheal Unity, 5s. 9d. (all paid of 4s.); 15 North Basset, 26s. 9d.; 50 Vale of Towy, 4s. 9d.; 100 Redmoor, 1s. 6d.; 1 West Tolgus.

MR. G. D. SANDY, SHAREDEALER, NO. 48, THREADNEEDLE STREET, LONDON, E.C., HAS SPECIAL BUSINESS IN THE FOLLOWING SHARES:—

Bedford United.	Garlinda.	North Treaskerby.
Bedol-Aur.	Great Laxey.	North Devon Silver-Lead.
Buller.	Great South Chiverton.	Proper United.
Bryntall.	Great Retallack.	South Gorland.
Carnborne Vein.	Great North Downs.	Tincroft.
Copper Hill.	West Wheal Grylls.	Vale of Towy.
Cranes.	Kelly Bray.	Wheal Haurie.
East Grenville.	Lady Bertha.	Wheal Ludcott.
East Laxey.	North Frances.	Wheal Kitty (St. Agnes).
East Rosewarne.	North Pool.	Wheal Kitty (Lelant).
East Wheal Vor.	North Rosewarne.	Wheal Tremayne.
Trimley Hall.	North Shepherds.	Wheal Unity.
	Great Fortune.	East Lovell.

A selected list of bona fide shares for investment forwarded gratis. Current Daily Price List may be obtained as usual.

MR. JOHN R. PIKE, GENERAL SHAREDEALER, OFFERS HIS SERVICES TO INVESTORS. 3, PINNERS COURT, OLD BROAD STREET, LONDON.

MR. WM. BIRDSEY, MINE AND SHAREBROKER, NO. 2, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C. W. BIRDSEY IS A BUYER OF 500 (or any part of) Altan and Quenagen Mining Company (Limited), at £2 per share.

MATTHEW GREENE, STOCK AND SHAREBROKER, 9, GRACECHURCH STREET, LONDON, HAS SPECIAL BUSINESS IN Great Laxey, East Laxey, East Smeall, East Rosewarne, Trevelyan, and East Grenville. Gentlemen of position can have shares registered in their name, if buyers, before payment, and if sellers cash on receipt of transfer. Commission 1¼ per cent. Bankers: London and County Bank; Imperial Bank, Lothbury.

RICHARD CLIFT, MINE SHAREDEALER, late of Redruth, now 48, THREADNEEDLE-STREET, LONDON, where all letters are to be addressed.

MR. H. WADDINGTON, MINING AND SHAREBROKER, 30, THROMGORTON STREET, LONDON, E.C.

Shares in railways, mines, &c., bought and sold on the usual commission. Clifford Amalgamated, Granbler and St. Aubyn, East Granbler, and Great South Tolgus should be bought at once. West Seton shares should be bought at the present reduced price.

MR. E. GOMPERS, MINING OFFICES, 3, CROWN CHAMBERS, THREADNEEDLE STREET, LONDON, E.C. BUSINESS TRANSACTED IN BRITISH AND FOREIGN STOCKS AND SHARES. Terms, 1¼ per cent. Bankers: London and Westminster Bank.

MR. JOHN BATTERS, STOCK AND MINING SHAREBROKER, 13, THROMGORTON STREET, LONDON, E.C., pays particular attention to British Lead, Copper, and Tin Mines, for which he solicits orders to sell or buy, at net prices.

MR. THOMAS CARTHEW, MINING OFFICES, 17A, SISE LANE, BUCKLESBURY, LONDON, E.C. Reliable information respecting mining generally can be obtained by applying as above. Bankers: Roberts, Lubbock, and Co., 15, Lombard-street, London.

MR. WALTER TREGILLAS, STOCK AND SHAREBROKER, 3, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C., strongly recommends the following mines for investment, which are safe to have a rise in price:—Santa Barbara Gold, North Rosewarne, North Shepherds, Wheal Lovell, New Rosewarne, New Wendon, East Basset and Grylls, New Trevelyan, and Great Wheal Vor.

MR. J. P. ENDEAN, STOCK AND SHAREBROKER, 1, CROWN COURT, OLD BROAD STREET, LONDON, E.C.

Having had 25 years' experience in the mining districts of Devon and Cornwall, and three in the London market, with daily information of important changes from qualified agents, also the most authentic reports relating to other investments, he is in a position to afford the earliest information to his clients, and to direct capitalists whether to buy or sell in mines, railways, or other securities. Investors should apply to him for reliable information relative to the Chiverton Mines, also the Carnborne and Clogau districts.

A carefully selected list of sound progressive and dividend shares (certain to give a large percentage immediately) forwarded on receipt of 5s. in stamps. Orders and telegrams receive immediate attention.

MR. D. STICKLAND, M.E., having had upwards of 40 years' mining experience in Cornwall, several years of which he has had the entire management of mines therein, enables him to GIVE GOOD ADVICE thereon. MINES INSPECTED AND FAIRLY REPORTED ON. DEALER IN MINING, RAILWAYS, AND OTHER SHARES. His monthly Circular forwarded on receipt of 6s. postage stamps. All communications between this and Christmas to be addressed Padstow, Cornwall. Wellington Chambers, 75, Cannon-street West, London, E.C.

MR. THOS. THOMPSON, MINING OFFICES, 12, OLD JEWRY CHAMBERS, LONDON, E.C.

MR. J. W. GILBERT, MINE SHAREBROKER, 1, PINNERS COURT, OLD BROAD STREET, LONDON.

THOMAS MOLYNEUX AND CO. (Late Ligon, Molyneux, and Co.)

MINE AGENTS, SHAREBROKERS, AND GENERAL COMMISSION AGENTS. SHARES OF EVERY DESCRIPTION BOUGHT AND SOLD on commission, or otherwise. Especial attention is given to buying and selling mining shares. The latest information can be given as to present prices and prospects, which they are enabled to give by daily communication with their agents in London, Devon, Cornwall, Ireland, and Wales. Mines inspected and reported upon by experienced agents, and reliable information given as to mining property.—Address, THOMAS MOLYNEUX AND CO., No. 28, Princess-street, Manchester.

MANCHESTER. MR. W. HANNAM, MINING, SLATE QUARRYING, INSURANCE, AND GENERAL SHAREBROKER. ROYAL INSURANCE BUILDINGS, KING STREET, MANCHESTER. A Monthly Investment Circular on application.

MR. IMBERT, TRAVELLER for the PONT-A-MOUSSON FORGES, MEURTHE, FRANCE, DESIRES TO UNDERTAKE IN FRANCE THE PLACING OF ENGLISH IRON. Address as above.

ISAAC FRANCIS, NANT, WREXHAM, a dresser of 30 years' experience, is OPEN TO INSPECT ANY DRESSING PLACE on moderate terms. Mr. FRANCIS can introduce PLANS OF IMPROVEMENTS that will SAVE THIRTY PER CENT. COST in certain departments of any dressing floors.

TO THE SHAREHOLDERS OF THE BRYN GWIOG, LONG RAKE, AND BILLINS MINES.

Sirs,—The melancholy death of Mr. Dunford, our late esteemed secretary, has caused a vacancy in the London management of the above mines. As I have been largely interested from the commencement, and spent much valuable time in assisting in laying out, and in the general management of bringing them to their present state of productiveness, and in all probability their future profitable one, has induced me to offer myself for the vacant office of secretary. As I have always filled the office of purser in two of the above mines, and am well acquainted with the details of the secretarialship, I could with a little extra expense (and for much less than if done separately) combine and fill both offices, at the same time render my usual assistance to the local manager in all future operations. Should you approve of my application, you will oblige by retaining for me your vote and influence, or send me your proxies for the forthcoming meetings. I am, your obedient servant, WM. MICHELL.

42, Cornhill, London, Nov. 25, 1864.

LEAD ORES.

Mines.	Tons.	Price per ton.	Purchasers.
Sold on the 18th November.			
Miners Boundary, &c.	20	£13 5 0	A. Eytton.
Sold on the 21st November.			
Nanty	45	14 0 0	Sims, Williams, & Co.
Sold on the 24th November.			
Mount Pleasant	16	13 5 0	A. Eytton.
Hendre Ucha	10	13 9 6	Newton, Keates, & Co.
Bryngwyn	13	9 6	A. Eytton.
East Pant Du	10	14 6 0	ditto
Fron Hall	8	13 0 0	ditto
Pantymwyn	10	12 13 0	Newton, Keates, & Co.
Roman Gravel	10	13 1 6	ditto
ditto	10	13 1 6	Walker, Parker, & Co.
Llanerchyr	11	13 1 0	Newton, Keates, & Co.
Cae Conroy	10	14 7 6	Walker, Parker, & Co.
Dyffryn	13	12 17 6	ditto
Bryntall	7	12 4 0	Newton, Keates, & Co.

BLLENDE.

Mine.	Tons.	Price per ton.	Purchasers.
Sold on the 23d November.			
Great Laxey	200	£3 8 6	Vivian & Co.

BLACK TIN.

Mines.	Tons.	Price per ton.	Purchasers.
Sold on the 17th September.			
Wheal Par	3 8 1 3	£63 2 6	£215 10 0—Redruth Co.
Sold on the 19th October.			
ditto	2 14 0 19	64 7 6	174 7 0—ditto
Sold on the 16th November.			
ditto	3 9 0 1	61 17 6	213 9 11—ditto
Sold on the 17th November.			
Great Wh. Vor	61 7 1 18	—	3278 11 11—
Sold on the 24th November.			
Wheal Grenville	10 17 0 7	62 0 0	—Bischoff Co.
ditto	2 14 0 25	60 0 0	—ditto

COPPER ORES.

Sampled Nov. 9, and sold at Tabb's Hotel, Redruth, Nov. 24.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
Clifford Amalgamated	81	£11 17 6	North Treaskerby	70	£4 16 6
ditto	80	4 17 6	ditto	67	4 12 6
ditto	65	1 19 6	ditto	65	3 8 0
ditto	65	2 3 6	ditto	56	3 18 6
ditto	62	1 19 6	ditto	54	3 5 6
ditto	56	1 10 6	ditto	48	3 12 6
ditto	54	6 13 6	West Caradon	74	6 7 6
ditto	53	3 18 0	ditto	72	4 17 6
ditto	53	6 1 0	ditto	65	5 4 6
ditto	12	4 4 0	ditto	63	4 2 6
Wheal Rose	108	2 18 0	ditto	21	4 0 0
ditto	107	4 14 0	Great Wheal Busy	40	13 6
ditto	95	3 3 0	ditto	34	3 2 6
ditto	80	5 17 0	ditto	33	3 6
ditto	65	4 9 0	ditto	30	2 5 6
ditto	61	9 7 0	ditto	26	2 3 6
ditto	44	4 16 0	ditto	19	2 1 0
South Caradon	79	8 7 0	Boscawen	78	2 0 0
ditto	78	8 7 0	ditto	22	7 9 0
ditto	72	5 8 6	Wheal Polmar	60	5 2 0
ditto	70	15 3 6	ditto	33	4 0 0
ditto	58	19 5 6	Gonamena	80	3 6 6
ditto	57	5 8 0	ditto	39	2 14 0
ditto	37	14 7 6	North Downs	41	6 5 0
Phonix Mines	76	3 5 6	ditto	40	5 5 6
ditto	72	2 16 6	Molland	45	4 10 0
ditto	62	15 6 6	South Dennis	24	5 10 0
ditto	62	1 12 6	East Downs	24	5 4 6
ditto	51	3 12 0	East Treaskerby	10	2 3 6
ditto	37	6 8 6	Crescrawke	8	3 8 0

WATSON AND CUELL'S MINING CIRCULAR.

WATSON AND CUELL,
MINING AGENTS, STOCK AND SHARE DEALERS, &c.
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

Messrs. WATSON and CUELL having made arrangements for transferring their weekly Circular, which has had so large a circulation during the past ten years, to the columns of the *Mining Journal*, their special reports and remarks upon Mines and Mining, and the state of the Share Market, will in future appear in this column.

In the year 1843, when Cornish mining was almost unknown to the general public, attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. J. Y. Watson, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1862), "Cornish Notes" (second series, 1863), "The Progress of Mining," with Statistics of the Mining Interest, annually for 21 years, &c., &c. In the Compendium published in 1843 Mr. Watson was the first to recommend the system of a "division of small risks in several mines, ensuring success in the aggregate," and Messrs. Watson and Cuell have always a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advice in regard to mines and share-dealing than there is at present; and, from the lengthened experience of Messrs. Watson and Cuell, they are emboldened to offer, thus publicly, their best services to all connected with mines or the market, as they have for so many years done privately, through the medium of their own Circular.

Messrs. WATSON and CUELL transact business in the purchase and sale of mining shares, and other securities, payments of calls, receipt, and transmission of dividends, obtaining information for clients, and affording advice, to the best of their knowledge and judgment, based on the experience of more than 30 years active connection with the Mining Market.

Messrs. WATSON and CUELL also inform their clients and the public, that they transact business in the public funds, railways, docks, insurance, and every other description of shares dealt in on the Stock Exchange.

Messrs. WATSON and CUELL are almost daily asked their opinion of particular mines, as well as to recommend mines to invest or speculate in, and they give their advice and recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so fluctuating as mining.

Messrs. WATSON and CUELL having agents and correspondents in all the mining districts, and an extensive connection among the largest holders of mining property, have the more confidence in tendering their advice on all matters relating to the state and prospects of mines and mining companies, and are enabled to supply shares in all the best mines at close market prices, free of all charges for commission.

THE DEVON GREAT CONSOLS.

It is not yet twenty-one years since the Devon Great Consols Mining Company was formed and commenced operations, Capt. Josiah Hitchens being one of the chief promoters. At that time the sett, which stretches from the River Tamar to the River Lumburn, a distance of three miles in length and about two miles in width, was occupied entirely by fields and plantations, the only trace of mining adventure upon it being an old half-forgotten shaft, overgrown with trees, and said by tradition to have been dug about the middle of the last century. At this point the company set to work. The shaft, which was 14 fms. deep, was cleared out and enlarged to good working dimensions before it was sunk any further. Then the miners proceeded to deepen it, and at 17 fms.—18 ft. below the old working—came upon the famous lode which has made the fortune of the mine. No calls have been needed since that time. The company at once entered upon a career of unexampled prosperity. Never since when at Huel Virgin, a hundred years ago, the first five weeks and two days' working produced 15,300l. worth of ore at the cost of a little over 200l., had such a discovery been made. The consequences are well known. The shares, 1024 in number, on which only 12s. has been paid, have been sold for 850l., and though they have had their fluctuations—falling in the panic of 1847-48 to 160l.; and again, when a false report was circulated of the condition of the mines, in a letter signed "Typhoon," from 400l. to 300l.—they are now quoted at 600l., and have been sold within the past few weeks at 590l. As the present rate of dividend is over 10 per cent. on that amount, it is not unlikely that they may rise even higher. Seeing that shares which originally cost 12s. have realised, and still realise, such enormous prices, it is easy to understand what a literal "mine of wealth" the Devon Great Consols has been to the first promoters, several of whom are still interested in the undertaking. The number of shareholders was never very large, and we believe the most considerable holders are the directors, Messrs. W. A. Thomas, J. Thomas, T. Morris, and P. Blakeway.

The statistics we give will show that the property of the undertaking has been of the most substantial character. Twenty complete years have elapsed since the mines commenced working, in 1844. In that period 397,396 tons 1 cwt. 2 qrs. of copper ore, were sold for 2,345,993l. 18s. 9d. Up to the present time the sales have been over 400,000 tons, nearly two millions and a half having been received from that source. Excluding the first twelve months, in which the company can hardly be said to have been in full working order, we get the following results:—The smallest quantity of ore sold in one year was in 1854, 13,292 tons 10 cwt. 2 qrs.; the largest in 1864, 26,354 tons 7 cwt. 3 qrs., containing 1,678½ tons of fine copper. The smallest amount realised was in 1847, 98,610l. 3s. 11d.; and the largest in 1857, 159,432l. 7s. 9d. Last year the copper ore raised produced 130,175l. 6s. 8d.; and the sales now exceed 200 tons of 21 cwt. per month. During the twenty years the owner of the property, the Duke of Bedford, received (exclusive of payment for surface damage and a premium of 20,000l. for the renewal of the lease and the extension of the sett) dividends to the magnificent amount of 182,036l. 9s. 2d. That has now been increased to 190,000l. His Grace has never received less than 71,891l. 6s. 11d., which was in 1847; he has received as much as 12,117l. 1s. 4d., which was in 1854. To the end of the twenty years 912,834l. had been divided among the shareholders, but the amount of profit to the present date must be put at 950,000l.; and by the time the mine shall have completed its twenty-first year the net profits realised will be little, if at all, short of a million! The year in which the largest amount was divided was the second of the company's existence—1846—when, of course, there had been little occasion for expenditure on plant. The dividend then reached the aggregate of 72,704l. The smallest dividend was declared in 1848, when 15,204l. 16s. 4d. was shared among the proprietors. Last year the sum appropriated for the dividend was 56,320l., and the bi-monthly declarations for the current twelve months have been at the rate of over 60,000l. Up to the present date the total amount of dividend paid on each share—originally 12s. but recollecting that it has been 93d. These figures will show that the interest on a first investment of 12s. in the Devon Great Consols has averaged 44½ l. a year for the past 20 years, or 445 per cent.!

This recital of the particulars of the past prosperity of the Devon Great Consols should be supplemented by the statement that there is every prospect that the concern will long continue to hold its high position. Under good management, production and discovery go hand and hand in the working of a mine; and it is usual, at least where the ground is rich, to leave parts of the lodes or mineral veins untouched, fresh explorations being at the same time made. These reserves—as the unworked portions of lodes are called—form the actual ascertained value of a mine. At Devon Consols they are calculated to amount at the present time, exclusive of the halve, or most inferior quality, to upwards of 70,000 tons. Including the halve, the reserves have a money value approaching half a million. The progress of the works also continually reveals fresh riches, and it was only in May last that a very productive and valuable new lode was cut, from which large quantities of rich ore are now being raised. The last report states that the reserves were never greater, nor the prospects of the mine more encouraging.

The surface works at Devon Consols occupy a total area of something like 140 acres, and are so distributed over the length and breadth of the sett that a stranger would be led to imagine that they were several separate concerns. The magnitude of the operations at the several points from which the mine is worked would also tend to induce that belief. Indeed to each of these points the name of a separate mine is given; but however distinct from one another Wheal Maria, Wheal Fanny, Wheal Anna Maria, Wheal Josiah, and Wheal Emma may appear to be, they are all connected below, and one may walk underground a distance of two miles and a-half from one extremity to the other. Twenty-eight miles of ground have been explored, and one of the shafts (Richard's engine-shaft, named after Capt. James Richards, the manager) has reached a depth of 224 fms., or 1344 ft.—over a quarter of a mile. Great, however, as this depth is, there are several mines that far exceed the Devon Consols in this particular. At Denkinfield, in Cheshire, there is a coal pit the lowest point of which is 360 fms., or 2160 ft. below the surface; and a mine in Cornwall has been sunk to about the same depth. There are between five and twenty and thirty shafts at Devon Consols; and the principal ones include—Morris's engine-shaft, named after Mr. T. Morris, the resident director; Richard's engine-shaft, already mentioned; Gard's engine-shaft, where the company commenced operations; Hitchens's, Agnes's, and Anna Maria engine-shafts. The value of the materials and machinery on the mine is estimated at 60,000l. Included in this calculation are the following engines and water-wheels: Two steam-engines of 40-horse cylinder, 71-horse power each; four steam-engines of 30-inch cylinder, 54-horse power each; two steam-engines of 24-inch cylinder, 34-horse power each; two locomotive-engines, with two 12-inch cylinders each. The two 40-horse engines are employed in pumping; the others in hauling, crushing &c. There are 33 water-wheels on the mine, the principal of which are—two wheels, each 40 feet diameter and 15 feet breast, and of 140-horse power, worked by water from the Tamar, and engaged in pumping from shafts at Wheal Anna Maria (137 fathoms deep), and Wheal Josiah (224 fathoms), about half a mile distant; one wheel, 30 ft. diameter and 10 ft. breast, 80-horse power, pumping from Agnes's Shaft (185 fms.); one wheel of 100-horse power, 30 feet diameter and 16 feet breast, forcing up water by plunger lifts from the Tamar, a distance exceeding 200 fathoms, and 67 fathoms perpendicular height, to a reservoir at Wheal Josiah, at the rate of over 500 gallons per minute, for dressing, condensing, and other purposes; two wheels, each of 45-horse power, for pumping and crushing; three wheels, each of 25-horse power, for hauling.

There are no fewer than 1280 persons employed on the mine, whose wages are about 3300l. per month. They are distributed in the following manner:—Underground—Agents or captains, 10; men and boys, 450. Surface—Agents, 10; smiths, carpenters, sawyers, masons, engineers, railway men, foundrymen, and labourers, 295. Dressing department—Men, 180; boys, 165; girls, 217—521 in total, 780. Grand total, 1280. It is one peculiarity of the Devon Consols that all the machinery needed—even the steam-engines—is made upon the mine. The establishment is indeed of the completest character, and includes a foundry with all its appurtenances; a fitting shop; a large quantity

of machinery for executing metal works, including a steam hammer; saw mills driven by water; and a shoeing forge; in addition to the usual smiths' and carpenters' shops. The efficiency of the resources of the mechanical department will be apparent when it is stated that one of the large engines was lately removed a considerable distance from one part of the mine to another, re-erected, and at work in 13 days. The mine also possesses a locomotive railway four miles long, terminating in an incline of half a mile at Morwillham, where the company have a ship dock and store-rooms. Branches from the railway penetrate to all the principal parts of the works, running into the main coal-yard and store. It will serve still further to illustrate the magnitude of the company's operations if we state that there are consumed per month about 200 tons of coal, 160 loads of timber (50 feet per load), and 200 lbs. of powder; and that the rates and taxes paid to the parish of Tavistock amount annually to about 1200l. Last year 5340l. was expended in timber. In the store, an extensive building of several floors at Anna Maria, is kept all the miscellaneous assortment of manufactured articles used upon the mines. The value of the stores was estimated at the time the last balance-sheet was made up at 6500l.—*Western Morning News*.

THE IMPERIAL MERCANTILE CREDIT ASSOCIATION (LIMITED) ARE AUTHORIZED TO RECEIVE APPLICATIONS FOR £2,800,000 CERTIFICATES OF DEBENTURE OF

THE ATLANTIC AND GREAT WESTERN RAILWAY (NEW YORK-PENNSYLVANIA-OHIO).

Of which £1,200,000 have been already applied for.
These certificates will be issued at £20 for £100, to be redeemed at par, £100 sterling, at the end of three years, with interest at 8 per cent. per annum, payable half-yearly, on the 15th of May and 15th of November in each year; the payment of the interest in London being guaranteed by the Consolidated Bank (Limited), London.

TRUSTEES.
Samuel Gurney, Esq., M.P.; John P. Kennard, Esq.; Charles Mozley, Esq.

THE Consolidated Bank, London and Manchester.
Messrs. A. Haywood, Sons, and Co., Liverpool.

SOLICITORS.
Messrs. Freshfields and Newman, Bank-buildings, London, E.C.

BROKERS.

Messrs. Joshua Hatchinson and Son, 15, Angel-court, Throgmorton-street, London, E.C.
E. F. Satterthwaite, Esq., 38, Throgmorton-street, London, E.C.
Messrs. T. Tinsley and Sons, No. 44, Brown's-buildings, Liverpool.
Messrs. Shore and Kirk, No. 14, St. Ann's-square, Manchester.

The Imperial Mercantile Credit Association (Limited) are prepared to receive subscriptions for the above amount of certificates of debentures, of which £1,200,000 have been already applied for.

The Atlantic and Great Western Railway consists of the following divisions and branches:—

The main line in New York	50 miles
" in Pennsylvania	90 "
" in Ohio	245 "
Extension in New York (Buffalo)	45 "
" to Oil Creek in Pennsylvania	35 "
" to Coal Regions in Ohio (New Lisbon)	40 "
" to Cleveland	67 "
Total	552 miles.

Also the Erie and Niagara Railway, belonging to same system, 30 miles in length, is wholly in Canada, and secures an enormous coal traffic over 200 miles of the Atlantic and Great Western, by whom it has been constructed, and is now chiefly owned.

The route of this great railway, connecting New York with St. Louis, a distance of 1200 miles (without change of carriages or break of gauge), passes through Free States, far removed from the scene of war. The line is now completed, and in possession of a traffic which may fairly be called extraordinary. For September last the gross earnings on 323 miles open were at ordinary exchange at the rate of £1,100,000 per annum (exclusive of the bonus of 10 per cent. paid by the Erie Railway on all through traffic, which will, probably, reach £100,000 per annum additional), the earnings have increased since the commencement of the year by 100 per cent. This, even at the present exchange, would leave a large surplus, after payment of the interest in gold on the bonded debt. The power to increase the fares will, of course, be exercised, if the present exceptional rates of exchange should continue.

The total bonded debt over the whole system of the Atlantic and Great Western Railway is £3,600,110, and with the exception of proceeds of bonds £1,755,070, held by the public, the line has been constructed with funds advanced by capitalists, whose anticipations of profitable results have been far more than realised; the railway, although only partially developed, exhibiting returns of traffic and revenue which may, without exaggeration, be designated unexampled.

When this undertaking was projected it was found necessary to obtain powers for its construction from each State through which it would pass. This compelled independent organisations and separate financial arrangements; the inconvenience attending which has become so manifest that it is determined to consolidate the whole line under one administration. Pending the completion of legislative enactments, it has been resolved to issue sterling certificates of debenture, payable in three years, bearing interest at 8 per cent. per annum, which interest is guaranteed by the Consolidated Bank, and the principal secured by a deposit with the trustees of bonds and shares amounting, at usual exchange, to £4,230,493.

The bonds and shares so deposited will be kept at the Bank of England in the names of the trustees, and the form of declaration of trust to be executed by them may be inspected at the office of Messrs. Freshfields and Newman.

The Erie Railway, of which the Atlantic and Great Western is practically an extension, upon a mileage of about the same extent, but constructed at a cost nearly three times as great, has earned in the present year sufficient not only to pay interest on all its bonded debt, but also a dividend of 10 per cent. on ordinary stock. The Atlantic and Great Western Railway, in addition to its through traffic in common with the Erie, has almost a monopoly of the petroleum traffic in Pennsylvania, with vast coal fields, and other important sources of local revenue. The cost of its construction having been so much less, and its mortgage debt consequently so much smaller, with an assured traffic at least equal, it is estimated that in the three years, during which the certificates of debenture ran, the payment of the principal will be provided for out of revenue alone.

The directors of the Erie Company have manifested the estimation in which they hold the Atlantic and Great Western Railway, and the opinion they entertain of its future prospects, by contracting to supply for its use, at their own expense, rolling stock to the extent of one million sterling.

The Atlantic and Great Western Railway has been constructed by Thomas W. Kennard, C.E., as engineer-in-chief, and under the immediate superintendence of an experienced agent of Messrs. Peto and Betts. A report from Sir S. Morton Peto, Bart., M.P., is annexed, showing that the works have been executed in the most substantial manner. Appended are some statistics, derived from official returns, relating to the increase in the carriage eastwards of produce during the past five years from some of the chief cities of the West, with which traffic the Atlantic and Great Western Railway is directly connected. From these figures the causes of its extraordinary revenue may be deduced. The certificates of debenture are in sums of 100l., 500l., and 1000l. each, with coupons attached for interest at 8 per cent. per annum, payable half-yearly. The interest for the whole term will be guaranteed by the Consolidated Bank, with whom securities have been lodged.

The price of issue is fixed at 90, and the instalments are payable as follows:—

5 per cent. on application.
10 " on allotment.
10 " 17th January, 1865.
15 " 17th February, "
15 " 17th March, "
17 " 17th April, "
18 " 15th May, "
90 " less coupon £4 per cent. due that day.

The certificates will be paid off at par, on 15th November, 1857. The interest on the investment, including the redemption at par, is upwards of 12 per cent. per annum, exclusive of interest on deferred instalments.

Subscribers have the option of paying any or all of the instalments in advance, and will be allowed a discount of 8 per cent. per annum on each prepayment. After allotment, scrip will be issued to "bearer." On payment of the final instalment, the scrip will be exchanged for certificates of debenture, with guaranteed interest coupons attached, payable 15th May and 15th November in each year.

To Samuel Gurney, Esq., M.P., J. P. Kennard, Esq., and Chas. Mozley, Esq., Trustees.

9, Great George-street, Westminster, Nov. 4, 1864.—DEAR SIR: You are aware that, at the request of the capitalists furnishing the funds for the construction of the Atlantic and Great Western Railway, my firm undertook the grave responsibility of the supervision of the works of the line, to be executed under a contract with Mr. Kennard, and from the plans and designs of Mr. Thomas W. Kennard, the engineer-in-chief of the railway. Before the works were commenced my firm sent one of its most experienced agents, who had superintended the execution of several large works, and who had been in its employ upwards of 30 years, and entrusted to his charge the supervision of the various works to be executed on the railway. It is due both to Mr. Kennard, the engineer-in-chief, and to Mr. McHenry, the contractor, that I should state to you that the position we occupied, which might have been an invidious one, has not in the slightest degree perturbed that character. Every recommendation of our agent has been at once cheerfully carried out, and Mr. McHenry has executed his contract with an honest desire to carry out every engagement in a fair and liberal spirit. The line has been ballasted and laid in a style fully equal to the best of our English railways, while the extremely favourable nature of the country through which it passes has rendered necessary so few works of art, that its maintenance need not exceed the average cost per mile of our railways at home. The stations throughout are of ample extent, and the sliding accommodation fully equal to the requirements of the traffic. It must be very satisfactory to you to find that the engineer-in-chief states in his last report that the traffic at the present time is sufficient to pay, at the then price of gold, the dividend on all the consolidated bonds of the entire line, assuming them not to be issued to a greater extent than £6500 sterling (six thousand five hundred pounds sterling) per lineal mile. Estimates and predictions are so often falsified that this fact becomes peculiarly valuable, the more so as at the present time the rolling stock is not more than equal to the requirements of the local traffic; and when the rolling stock to be provided under the agreement with the Erie Company is placed on the line, these increased facilities cannot fail to produce an amount of traffic far exceeding the estimates which have been prepared in regard to it. I am, dear Sirs, (for Betts and Self), yours faithfully, S. MORTON PETO.

Increase in the carriage of produce from west to east during the past five years, derived from official returns.

CHICAGO.

	Total grain.	Pat Cattle.	Pigs.
1859 Bushels	16,754,138	32,500	110,247
1860	31,108,759	92,000	237,164
1861	50,481,867	115,000	289,094
1862	56,487,110	107,966	491,135
1863	54,741,639	197,341	462,200

MILWAUKEE.

	Total grain.	Pat Cattle.	Pigs.
1859	6,555,896	10,000	11,068,000
1860	9,995,000	16,710,580	14,682,103
1861	16,710,580	17,739,389	30,553,668
1862	16,992,335		41,609,553

TOLEDO.

	Flour.	Wheat.	Cattle, pigs, and sheep.
1860 Barrels	502,000	5,083,336	209,608
1861	1,372,111	6,386,936	281,495
1862	1,538,325	9,527,629	491,804

	BUFFALO.	Cattle, pigs, and sheep.
1860	Total grain. Bushels 37,089,461	14,040,303
1861	61,460,691	25,999,823
1862	72,872,454	107,129,461
1863	64,755,879	149,428,894

As respects petroleum, in the carriage of which this railway has practically the monopoly:—

	Petroleum produced in 1859	750 bbls. of 40 gallons.
" " 1860	50,000	"
" " 1861	550,000	"
" " 1862	2,000,000	"
" " 1863	2,230,000	"

The Cleveland branch of the Atlantic and Great Western Railway is engaged to the full extent of its capacity in the carriage of iron, the ore from the mines of Lake Superior, and in shipping coals in return vessels. These mines produced in—

	From ore.	Copper.
1859	Tons 65,679	Tons 6,041
1863	280,000	10,000

TRADE OF CINCINNATI.—Some idea of the enormous growth of trade at the West may be formed from the following statement of the value of the imports and exports of leading staples at Cincinnati:—

	1858-59	1861-62
.....	\$160,270,954	\$179,733,695
.....	160,351,404	246,517,384
.....	147,226,262	578,570,362

ATLANTIC AND GREAT WESTERN RAILWAY—NEW YORK, PENNSYLVANIA, AND OHIO.

FORM OF APPLICATION.—(To be retained by the bankers.)
No. To the Imperial Mercantile Credit Association (Limited).
Having paid to the Consolidated Bank (Limited), the sum of £

I hereby request that you will allot me £

I am, your obedient servant,
Signature

Date

HENRY BRIGGS, SON, AND CO. (LIMITED.)

COLLIERIES AT WHITWOOD AND METHLEY JUNCTION.

To be incorporated under the Companies Act, 1862, whereby the liability of each shareholder is limited to the amount of his shares.
Capital £135,000, in 9000 shares of £15 each, of which it is intended to call up not more than 90,000l., or £10 per share; with power to create additional capital by new shares, if required.

Deposit 10s. per share on application. Further calls to be paid as follows:—£2 on allotment, in January, 1865; £2 10s. on March 1, 1865; and the remaining £2 10s. on July 1, 1865. Interest at 6 per cent. per annum will be allowed on all calls and prepayment of calls from date of payment until July 1, 1865; after which date all shareholders will participate in the profit made. Interest at 6 per cent. per annum will be charged upon any call in arrear, and, in case of its remaining more than one month unpaid, the directors may annul the allotment of the shares in respect of which such call shall be due, on returning to the allottee the amount actually paid by him.

FIRST BOARD OF DIRECTORS (PROVISIONALLY APPOINTED).
HENRY BRIGGS, Esq., Outwood Hall, near Wakefield.

HENRY CURRIER BRIGGS, Esq., Outwood Hall, near Wakefield—Managing Director.

Mr. GEORGE ROBSON, manager at the collieries.

Mr. JAMES INGHAM, cashier to Messrs. H. Briggs, Son, and Co.

Mr. JOHN HOPKINSON, traffic manager to Messrs. H. Briggs, Son, and Co.

Additional directors will be chosen from the holders of 50 shares, or upwards.

BANKERS—Messrs. Leatham, Tew, and Co., Wakefield.

SOLICITORS—Messrs. Scholey and Skipworth, Wakefield.

AUDITOR—To be appointed by the company.

PROSPECTUS.

This company is projected for the purpose of working the extensive collieries at Whitwood and Methley, near Normanton, Yorkshire, now carried on by the firm of "Henry Briggs, Son, and Co."

It is originated by that firm, with the primary view of securing the co-operation of all those connected with the collieries, either as managers and workpeople, or as customers, in the earnest hope of thus effecting a satisfactory solution of the difficult problem now so largely occupying the attention of political economists and philanthropists—namely, the best mode of associating capital and labour, and of preventing the occurrence of those trade disputes which so frequently disturb the social relations of our country.

The collieries are now in full operation, producing from 5000 to 6000 tons of coal weekly. They comprise about 2600 acres, held under lease from the Earl of Mexborough, the Hon. and Rev. P. Y. Savile, Messrs. Holdsworth, Favell, and others, forming altogether one of the most regular and best situated coal fields in West Yorkshire.

The estate is crossed by the Midland and North-Eastern Railways; and by the Methley branches of the Lancashire and Yorkshire, Great Northern, and West Yorkshire Railways; as also by the Aire and Calder Navigation, with all of which lines of conveyance the collieries are in direct communication.

The seams of coal now being worked are—the well-known Stanley Main Seam, 6 feet thick, and the Haigh Moor Seam, 4 feet 6 inches thick; and underlying these is the Middleton Main Seam, about 5 feet thick, which may hereafter provide a field for extended operations for upwards of fifty years to come.

There are three shafts now in use for drawing coal, with separate and independent pumping and ventilating shafts; the whole fitted with all the engines and other apparatus requisite for an extended trade.

The plant comprises, in addition:—2 locomotive engines; about 350 railway wagons (irrespective of 150 more in course of redemption under purchasing leases); 3 vessels for the canal trade; about 80 horses, and other farming stock, &c.

The real estate consists of 19 acres of freehold and copyhold land at Whitwood and Methley, with 88 cottages thereon, and the coal lying under 6 acres thereof.

A revised valuation of the property was made in 1860, when the present firm was constituted; and such valuation has been taken as the basis of all the subsequent annual stock-takings, subject to the usual deductions for the restoration of capital, and to the addition of the amount invested in increased plant.

The same basis will be adopted in valuing the entire property, when transferred to the intended company on July 1, 1865. It is estimated that this valuation will not exceed £85,000, including the sum of about £3500 paid for coal not yet worked.

The company will thus have the advantage of entering at once upon a business connection, which has been the gradual growth of upwards of 20 years, with every assurance of a satisfactory return for capital expended.

The members of the will retain in their own hands two-thirds of the share capital, and in allotting the remaining one-third a decided preference will be given to applications for shares,—first, from officials and operatives employed in the business; and, secondly, from the purchasers of the produce of the collieries. Surplus shares will be allotted among general applicants.

In order, however, to associate capital and labour still more intimately, the founders of the company will recommend to the shareholders that whenever the profit accruing from the business shall (after the usual reservation for redemption of capital and other legitimate allowances) exceed 10 per cent. on the capital embarked, all those employed by the company, whether as managers or agents at fixed salaries, or as workpeople, shall receive one-half of such excess profit as a bonus, to be distributed amongst them in proportion to their respective earnings during the year in which such profit shall have accrued.

The adoption of the mode of appropriation thus recommended would, it is believed, add so great an element of success to the undertaking as to increase rather than diminish the dividend to the shareholders.

The advantages anticipated are:—1. The attainment of a direct incentive to every worker, whether a shareholder or not, not only to do his own duty, but to see that his fellow-workmen do not neglect theirs.—2. The prevention of causes of dispute between the employers and employed.—3. The attainment of direct advantage to the operatives as well as the shareholders from the adoption of improved modes of working, either by

Notices to Correspondents.

THE SLATE TRADE.—In next week's Journal we shall publish the first of a series of papers on Slate Quarries as an Investment.

RED OXIDE OF IRON PAINT.—Would any reader kindly inform me how I can obtain information as to the manufacture of red oxide of iron paint; where it is manufactured, and from what class of ore it is made?—GLASGOW.

THE COAL TRADE IN AMERICA.—EMIGRATION.—In last week's Journal I observe an advertisement, in the form of a letter, offering very tempting wages to our miners. For aught I know to the contrary, Mr. Gemmell's offer may be perfectly genuine; but, bearing in mind the case of kidnapping for the army of the Northern States of America, now under examination before the magistrates of Liverpool, I think it only right to request the miners of Great Britain to use great caution, and to make full enquiry of respectable persons, before they enter into any engagement with agents for or from America.—CAVETO: Nov. 21.

WEST BEAR.—Will some one interested kindly inform me why there have been no reports in the Journal lately from this mine? I am a large shareholder therein, and know not what is doing.—H.

MINING IN IRELAND.—I was recently travelling in the south-west of Ireland, and during my journey visited Crookhaven, Schull, Skibberen, and other places. When in Schull I was surprised to learn how things in Schull Bay Mine are allowed to remain. In the beginning of this year it was decided to wind-up the affairs of the company, and a Mr. Hollah was appointed liquidator; and I believe if the property had been fairly disposed of there would have been something returned to the shareholders; but, from some cause or other, it now appears that there may be nothing whatever left after the expenses are paid. Surely some information should be communicated to the shareholders, that we may know how things are progressing, especially as I have heard it was not all unlikely a call may be made.—A SHAREHOLDER.

HINGTON DOWN.—Mr. Laws begs to acquaint "Shareholder" that he has never refused to reply by letter to any reasonable questions asked by adventurers respecting the mines in which they are interested.—50, Threadneedle-street, London, Nov. 25.

THE DEEPEST MINING WORKS.—"G. G." (Manchester).—The name of the deepest pit was stated in the Journal of Nov. 5. We are not aware that 1000 yards has ever been reached, except at Chatteroi, where there are pits of 1000 metres. There are no statistics of temperature published; but for some weeks past the subject has been referred to in letters from correspondents. Nothing has yet been stated which proves there to be any gradual increase of heat in descending, since the deepest mines are not always the hottest.

THE COAL OWNERS AND THE MINERS.—We cannot publish the letter of "Miner" (Wigan). HISTORY OF MINING.—"R. C." (Liverpool).—The work which would best suit "R. C." is, we think, Spargo's "Statistics of Observations on Mining," the price of which is 5s. It can be forwarded from our office on receipt of 5s. 2d. in postage-stamps or otherwise, for the book and postage.

COKE-OVENS.—"Coke" will find ample descriptions of coke-ovens and coking in Ure's "Dictionary of Arts, Manufactures, and Mines," vol. 1, and Percy's "Metallurgy," vol. 1. We know of no separate pamphlet on the subject; but there was a paper read before the South Wales Institute of Engineers, which might, perhaps, be obtained from the secretary for a few shillings.

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, NOVEMBER 26, 1864.

Although Metalliferous Mines are free from the danger of the explosive gases met with in collieries, it appears, from the Report of the Royal Commission, that the casualties from other causes of accident are even more numerous in metalliferous mines than in coal mines; but the absence of official returns upon the subject renders it difficult to make an accurate comparison. The principal causes of accident in metalliferous mines seem to be blasting, falling away from ladders, falling from one level to another, falls of the rocks, falls of stuff from the kibble, bursting of boilers, and abandoned shafts. Mr. W. W. TAYLOR stated that they had never had an accident occur from the man-engine. Capt. J. P. DAW did not think there was any danger of falling from one level to another with ordinary care. If a bunch of ore be found, they drive on the level, and sink down after that. There are many sinks made by the tributaries in stopping away the ground which would be equally dangerous with the winzes, and more so. Dr. G. SMITH did not think that the number of unprotected abandoned shafts was very great, and had never known a case in which a representation made to the proprietors of the mine, or the mine agents, had not been attended to.

The opinions as to the cause of accidents from blasting appear to be almost unanimous—that there is not sufficient care in tamping, and that the boring out of holes that have missed fire is permitted; the frequency of accidents in blasting seems to depend, in a great measure, upon the general management of the mine. Mr. WILLIAM RICHARDS said that at their mine they had only had one during the 12 years, and that was a premature explosion through the carelessness of the man; he inserted the tamping before he had properly cleaned the awl and taken out the few grains of powder on the side of the awl. Mr. THOMAS TREVELYAN did not think the men were usually careless; they were tolerably considerate and thoughtful men; they know what powder does, and, knowing the results of powder, they know that they are dealing with a very important ingredient. Capt. PETER CLYMO said that there must be some danger in blasting, particularly if the men are not very careful in what they put into the hole for tamping, but the men often take anything for the purpose, being in a hurry to get their work done. Capt. JOHN WENN described his prepared waterproof cloth cartridge cases. The objection to their general use was the price, but he contended that it was cheaper, because less powder would do; it will keep thoroughly dry, and if the powder is put into a rock where it is damp, without a case, it will destroy more powder than the cost of the case, and damp powder will make a considerable deal more smoke. Capt. JAMES POPE said they did sometimes use cartridges, but seldom; their men make their own cartridges of paper, and almost always use those. Dr. GEORGE SMITH considered that a hole ought never to be bored out after a misfire under any circumstance. Capt. J. RICHARDS, of Devon Great Consols, had never known of an accident arising whilst a man was using a copper-tipped tamping-bar. In the West of Cornwall it has been stated that copper tamping-rods were not perfectly safe, but they (at Devon Great Consols) had always found them safe. It was his opinion that a copper tamping-rod was perfectly safe, with proper tamping; if bad tamping be used, he believed there was danger in using any bar.

Referring to falling away from ladders, Capt. PETER CLYMO said that he could not tell whether those accidents were occasioned by carelessness. They sometimes carry a pick down in their hands, and then if a man has not pretty long fingers, he has not much hold upon the ladder-stay, and they slip in that way. The accidents from bursting of boilers may, probably, be attributed to the use of gauge-cocks only, and also to the general impurity of the water; the number of boiler accidents does not, however, appear to be large.

In connection with the question of the relative merits of South Wales and North Country steam coal, it has already been announced that the report of Messrs. RICHARDSON and BUNNING, the scientific delegates of the Northern Coalmasters' Association, has been formally laid before the North of England Institute of Mining Engineers. The report is very interesting as containing the explanation of Messrs. RICHARDSON and BUNNING for the fact that in the practical trials the Newcastle coal proved 25 per cent. less valuable than in their private experiments. The report now under consideration has been prepared with the utmost skill, and clears up many of the minor points of the Government report which were not altogether intelligible. Messrs. RICHARDSON and BUNNING appear to consider that to burn North Country coal as a steam fuel the heating surface of the boiler should be about twice the size of that which is generally required when South Wales coal is burned.

The boiler employed at Keyham adhered in its general proportions to the Admiralty formula—66 ft. grate to 16 ft. of tube per horse power—but had 50 per cent. less combustion chamber, and less than half the heating surface of the boiler used by Messrs. RICHARDSON and BUNNING in the Newcastle experiments; which would lead to the conclusion that much more space must be occupied for North Country coal than for South Wales coal. With regard to the coal used in the trials, Messrs. RICHARDSON and BUNNING assert that the coal used to represent North Country coals were called West Hartley, but they had evidently been long wrought, were very dull, and far from being well cleaned. In fact, they were by no means a fair sample of the steam coals generally supplied from the North Country collieries. This opinion may, or may not, be accurate, but it certainly appears strange that coals specially supplied for competitive trials should be below the fair general average. Again, the reference to the draught causing inconvenience when Hartley coal was used had better, probably, not have been made, since the experiments being made with North Country and with South Wales coal under similar circumstances, coals of equal quality would have given equal results.

It is explained that the calorific power of the Hartley coal was less at

Keyham than at Elswick, owing to the cinders being burnt at the latter place, and that the evaporative power of the Welsh coals was superior, partly because the samples were of a better quality than the North Country, and partly on account of the more rapid combustion of the latter coal. The fact that Hartley coals give more than six times the smoke of Welsh, and yet that a mixture of the two burnt almost without smoke, is recorded; and the practice on board the *Prince Jerome* is then given—for ordinary steaming, they use one-third Newcastle and two-thirds Cardiff; for high speed, half of each; and for great speed, all Newcastle.

With regard to the weathering of the coals, which is without doubt an important consideration, Messrs. RICHARDSON and BUNNING naturally pronounce an opinion in favour of North Country coal—attributing the chief injury to coal to arise from the presence of brasses. They state also that after each experiment the tubes and smoke-chamber were examined and cleaned. When Hartley coal was used the deposit was chiefly soot, but with Welsh coal it consisted of minute particles of a material having the appearance of coal; upon analysis, however, it was found that the Hartley refuse contained 42.79 per cent. of carbon, whilst the Welsh contained 36.28 per cent. only, the difference thus being more than 15 per cent. in favour of Welsh. It must be particularly gratifying to the North Country owners to find that, although the results were less favourable to North Country coal than they could have desired, there is evidence of the utmost impartiality having been shown, since even with Hartley coal the Government stoker obtained better results than those obtained with similar coal by the stoker specially sent by the Coalmasters' Association.

In another column of this day's Journal we publish an interesting article on the properties and uses of Magnesium, and although hitherto the metal has only been employed as a source of light, it is confidently anticipated that it will ultimately be produced so cheaply as to admit of its application to general industrial purposes. The process by which Mr. SOU-STADT produces the metal is, as has already been explained in the *Mining Journal*, as simple as it is ingenious. The lumps of the carbonate of magnesia are placed in large earthenware jars with a quantity of muriatic acid. The solution thus obtained is drawn off when clear, and mixed with a solution of chloride of sodium, or potassium. This mixture of magnesium and the alkaline chlorides is subjected to heat in porcelain basins until the moisture is evaporated. The dried mass remaining is fused in a platinum crucible, and when poured out is technically known as "material." To deal with this furnace is required, and the aid of sodium, which has already enabled chemists to obtain one of the latest metallic contributions to civilisation—namely, aluminium. So important is the part played by sodium, that upon its price almost entirely depends the cost of magnesium. To make the latter cheap enough to be generally useful, it will be necessary to discover some less expensive mode than the present of obtaining sodium, and this it is to be hoped will be done shortly. The material is submitted to heat in an iron crucible to liberate the magnesium. The metal thus obtained is still unfit for commerce, being brittle and unworkable. It is purified by distillation in closed vessels, somewhat upon the principle of mercury distillation from cinnabar. The finished metal is brought into the form of wire, in which state it has alone been used hitherto, by forcing through a small orifice by hydraulic pressure. Inasmuch as sodium and magnesium are not unfrequently found in sea water in proportion which would not be inconvenient in the manufacture of magnesium, it is to be hoped that at no distant period a mode of extracting the double chloride from the water direct will be discovered, for there can be no doubt that if cheap, a variety of purposes to which the metal could be applied would speedily be discovered.

COAL-CUTTING MACHINERY.

M. Guillaume Lambert, the eminent Belgian engineer, in a pamphlet just addressed to the Belgian Council on Mining, containing accounts of the improvements which have been introduced into the art of mining, makes the following observations on the subject of Coal-Cutting Machinery:—

It is by the assistance of compressed air that mechanical hewers, and particularly that of Messrs. Firth and Co., of Leeds, called the "Iron Man," or coal-cutting machine, have made such a brilliant start as to enable us to hope that the pick-man will have, especially in thin seams, a powerful auxiliary. Having had the opportunity of seeing Messrs. Firth and Co.'s coal-cutter at work in the West Ardsley coal pit, near Leeds, I will give an account, in a few words, of the results obtained. The machine is mounted on a carriage, or frame, supported by four wheels, like a pit wagon, in such a manner that it can travel on a small railway, the gauge of those in the pit, and placed along the face of the coal. The air-cylinder, the principal part of the system, is placed horizontally on this frame. The piston acts direct by means of an arm fixed on a shaft placed on a vertical axis. This axis carries at the same time a pick, or ravelin, which describes horizontally at each blow of the piston a movement analogous to that which is imparted to it by the miner.

The machine for compressing the air at the West Ardsley Colliery is very simply disposed. It is composed of a steam-cylinder of from 30 to 40-horse power, placed horizontally, and the piston of which acts directly on that of the air-pump, the cylinder of which is placed in the same line as the first. The air-receiver is formed of iron plates, and is about 10 yards long and 1 yard in diameter, and placed near the air-pump. At the time of my visit the steam employed by the air-pump was about 35 lbs. per square inch, and working at 14 revolutions per minute. This machine soon brought up the pressure of air to between 45 and 50 lbs. per square inch. In order to reach the coal-cutter the air had to travel a distance of 1000 yards, which included 30 yards from the receiver to the pits, 165 yards down the pit, and the rest along the road-ways. At the point where we saw the machine work the seam was nearly horizontal, and formed of two beds of coal, the lower one being 1 ft. thick, and the higher one 2 ft. The baring point of about 8 in. in thickness, formed of coal mixed with shale, separated these two beds. Moreover, as is generally the case in England, the floor and above all the roof was tough and easily sustained.

Under these conditions, these were the results with which the coal-cutter furnished us:—Having first measured off for the experiment a length of 5 yards (4.57 m.) along the surface of the coal, the machine was put to work, the pick-point being about 3 inches in breadth. During the first course over, the machine, managed by one man, struck 75 to 80 blows per minute, and after four minutes the seam was undercut for the 5 yards to a depth of at least 19 inches. An assistant then cleared out the groove by means of an iron hook, during the very short time necessary for running the machine back on the rails to the starting point, and for changing the tool and replacing it with another. This time the stoppage was less than a minute. A second course then took place. In consequence of the distance traversed by the pick it did not strike more than 65 to 70 blows per minute; the time employed on this second course was about 4½ minutes, but there was a short stoppage, owing to the fall of a certain amount of coal on the machine. The depth of the cut was then about ¾ of a yard (75 to 80 centimetres). During the cleansing process the machine was again run back, and the pick replaced by a longer one, which was very rapidly done. The third and last cut was then commenced. The depth this time was not more than 6 inches, but the 5 yards has again been done in 4 minutes. Sometimes, however, I remarked that the tool offered a strong resistance to coming out of the groove. The total depth of the groove was now a little over a yard (95 centimetres), and its size or depth at the face of the coal about 3 inches. This size, I understood, diminished from the face of the groove. After these figures, we can reckon that under these conditions the machine undercuts a yard (metre) along the face to about a yard in depth (0.95 m.) in 3-10ths minutes, including stoppages.

(At our wish, Mr. Firth put into operation a model of his coal-cutter, about a third of its ordinary size, at the establishment of De Keyn Brothers, at Brussels, on the 15th of March last, in the presence of the members of the Committee of the Collieries of the Department of the Centre.)

We will now report some other experiments, which confirm, to a certain extent, that which I have mentioned, and which, in other respects, prove that the cutter works very regularly.

The Institution of Mining Engineers of the North of England, at their sitting of Feb. 5, 1863, heard the reading of a report, which had been addressed to it by some of its chief engineers:—Messrs. John Daglish, Lindsay Wood, Forster, and Cochrane, on the machine for coal-cutting, of Messrs. Donisthorpe, Firth, and Ridley. The following is a statement of the principal facts related in this report. Five experiments have been made by these gentlemen, with the hewer or mechanical pick, in the pit at West Ardsley, near Leeds, and these are the results:—

FIRST EXPERIMENT.—Length of face of coal 10 yards. A groove was cut to a depth of 38 in. in 2¼ minutes—that is, 1 yard in 2¼ minutes.

SECOND EXPERIMENT.—Length of face of coal 15 yards. A groove was cut to a depth of 36 in. in 4½ minutes—that is, 1 yard in 3.1 minutes, not including stoppage for drawing back the machine.

THIRD EXPERIMENT.—Length of face of coal 18 yards. A groove was cut to a depth of 37 in. in 5½ minutes—that is, 1 yard in 3.3 minutes, not comprising stoppages for bringing the machine back, changing the picks, &c. As these stoppages lasted in all 10 minutes, the work done was 1 yard undercut to a depth of 37 in. in 3.8 minutes.

FOURTH EXPERIMENT.—Length of face of coal 35 yards. A groove

was cut to a depth of 37 in. in 2 hours 45 minutes—that is, 1 yard in 4.7 minutes: this time included stoppages.

FIFTH EXPERIMENT.—Length of face of coal 43½ yards. A groove was cut to a depth of 37½ in. in 2 hours 37 min.—that is, 1 yard in 3.6 min., including stoppages.

Admitting the duration of stoppages in the second experiment as in the others, a medium rate of working is arrived at of 1 yard undercut to a depth of 37 in. in 3.6 min., this comprises the time taken up with stoppages. This brings us back to 1 yard along the face undercut to 0.95 in. in depth in 3.93 min.—call it 4 minutes. (According to this the machine could replace 12 men.) Thus these figures perfectly agree with those mentioned before, and relative to the experiment in which I had assisted.

The English engineers terminate their report by judiciously mentioning that the employment of these machines must bring some amelioration in the ventilation of the workings, and in saying—"It is also very certain that, especially in thin seams, the introduction of these machines will relieve the miner of the hardest, most exhausting, and the most monotonous part of his work." From other reports of Mr. J. Hedley, Government Inspector of Mines, and of many English engineers, about this machine, all come to the conclusion, that before having seen the machine at work they were prejudiced against it, but have since changed their opinion.

From reports which I have just received from another mining inspector it seems that its introduction into the mines of the North of England makes great progress. As it can work as well in seams of ½ yard in thickness as in those of 1½ yard, one can understand that its employment will actually be of greater advantage in Belgium than in England.

In certain cases the great inclination of the seams, and the small resistance of the roofs, considerably increase the difficulties; but there is no doubt that, from the moment that the coal-cutter shall have been advantageously introduced in seams which are level, and having good roofs, it will soon penetrate into the inclined seams, and everywhere. It will, probably, have to undergo some modifications, but when the principle is put into practice, the additions are not waited for long.

The great number of patents granted, and of experiments made in England on the subject of this question, during the last two years, testify the great interest which is there taken in it.

TRIAL OF A NEW MACHINE FOR GETTING COAL.—A coal-cutting machine, on an entirely new principle, the invention of Messrs. Lock and Warrington, colliery owners, Kippax, and Messrs. Carrett and Marshall, engineers, Leeds, has been tried at the Kippax Colliery, near Leeds, in the presence of a number of colliery owners and mining engineers, including Messrs. Embleton, Morton, Pope, Rayner, Parker, Pickersgill, and other gentlemen. The trial, in every respect, was perfectly successful, and every gentleman present expressed his satisfaction at the manner the machine performed its work. The coal-cutting machines which have been tried recently in other districts have been worked by compressed air and on the principle of the pick motion. This machine is, however, worked by water-pressure, at 150 lbs. to an inch, conveyed in wrought-iron pipes from a small engine fixed near the bottom of the pit. The trial was made in the Allerton seam of coal, which is 6 ft. 6 in. thick, but contains a layer of dirt 3 in. thick, at the height of 20 in. from the floor, which separates the best and second seams of coal. The machine was mounted on four wheels, and traversed the coal tramways. The "holing" or "baring," which is the hardest and most laborious part of the colliery work, was done remarkably well, in one even straight line, and to a uniform depth. The cutters were fixed in a slotting-bar, worked with a steady longitudinal reciprocating motion at a slight angle, which ripped out the whole of the partition of dirt to a depth of 3 ft. 3 in. The apparatus being entirely self-acting in all its operations, it propelled itself forward, secured itself dead fast between the floor and roof, whilst the cutters were in operation, and again released itself with the return stroke. The machine is strong, and not at all complicated, and is likely to work with durability. It is beautifully arranged in its various movements, and works with such precision and exactness that anyone might almost fancy it was endowed with intelligence. One man is all that is required to attend to it, and he has nothing to do but to set it in motion and stop it when required. The machine worked 2 hours 49 minutes, and excavated the dirt out 3 in. thick and 3 ft. 3 in. under for a length of 23 yards 2 ft., and liberated from the solid bed of coal 44 tons. The average cost of "baring" by hand-labour at the same colliery is 8d. per ton; but the principal saving is in the economical working of the coal without cutting such a large proportion into slack as is done by hand-labour. The pressure of water can be increased to any required extent, and its quantity needs only be enough to fill the circuit of the pipes—the same incompressible fluid thus being used over and over again to convey the power any required distance from the source of power to the coal seam to be operated upon. The miners have named this new labour-saver the "iron man," and from his self-acting and industrious powers it is probable he will never become tired. Messrs. Lock and Warrington are so well satisfied with the advantages of getting coal by machinery that we understand they are making more machines in order to take all their coal worked by them.—Leeds Mercury.

ON THE APPLICATION OF IRON TO THE PURPOSES OF WAR AND NAVAL CONSTRUCTION.

The Duke of Somerset, First Lord of the Admiralty, presided at a crowded meeting at the Society of Arts, on Wednesday evening, when an important and elaborate paper on the structure of iron ships, as well for the purposes of trade as of war, was read by Dr. WILLIAM FAIRBAIRN, C.E., of Manchester. The paper described the early attempts at the use of iron for the purposes of navigation on canals, and illustrated the vast progress it had made since the commencement of the present century, the distinguished name of the writer being associated with the numerous and vast improvements which have taken place. The main apparent object of the writer, who brought to the consideration of the subject vast experience and experimental researches, was to impress upon naval architects the necessity of imparting to iron ships far greater strength than has been usually employed in their formation. He illustrated his observations by diagrams and by tables, and deduced some conclusions from which their presumed durability may be estimated. The subject of iron plating for the purposes of war necessarily formed an important element, although it was difficult in the present state of our knowledge definitely to come to any decided opinion on that all-engrossing topic. Dr. Fairbairn pledged himself, however, within a short period to present his views to the public, and to invite discussion, in the hope of settling, both theoretically and practically, some of the disputed points on that question. Much of the paper was technical, and related to the relative merits of punching and drilling through iron-plates. On the whole, Dr. Fairbairn gave the preference to the system of punching, not by the sledge-hammer, which was constantly used with far more exertion of muscular strength than of brains, but by the improved machinery for that purpose. Mr. Hawkshaw, C.E., gave the benefit of his great experience in favour of the drill. Mr. GRANTHAM intervened between his two friends, declaring that he did not agree altogether with the views of Mr. Hawkshaw, and an opinion seemed to be very generally expressed that drilling was preferable for iron girders, but that punching was better adapted for the peculiar forms into which iron was required to be shaped in the formation of floating bodies.

Some of Dr. Fairbairn's views on the subject of waves and their effects were questioned on nautical grounds, and Mr. Hawkshaw complained of what he considered the great oversight and mistake in the adaptation of iron plates to ships of war. Although iron armour-plating had been very extensively introduced, at vast national expense, this problem yet remained to be solved—whether the plates were to be merely used for the purposes of defence, or whether they may not also be successfully applied to materially strengthening the frames of the ships. This seemed to be a point to which the attention of naval architects had never been sufficiently devoted, although its importance must be obvious, as well in a scientific as in a practical view. As fouling formed the most formidable objection to iron ships, and as all efforts to prevent the galvanic action of sea water had hitherto failed, suggestions were strongly urged by Mr. Grantham, as a means of meeting the difficulty, that the frames and bodies of ships of war should in every instance be made of iron, with an outward planking of timber, so as to admit of their being coppered. This proposition was met by Capt. Selwyn, R.N., who asserted that modern shells would speedily set timber planking on fire, and that the attendant volumes of smoke would render the working of the guns impossible. It was also asserted that, so mysterious was the secret action between metallic bodies, which asphalt had hitherto failed to check, fouling would not be prevented by even wooden planking and copper sheathing. Mr. Rochussen observed that Westphalian iron bore a greater strain than any of the kinds of English iron which had been enumerated, and suggested that steel might be advantageously used in the framework of men-of-war. On the whole, opinions seemed to diverge on every branch and point of the question.

The Duke of Somerset, in closing the discussion, observed that the Board of Admiralty had been called upon from all quarters to build iron ships of war; they had yielded to the pressure, and had produced splendid models, objects of general admiration. He was far from saying that they had approached perfection; he had hoped that after this discussion he could announce with confidence to his colleagues that the question had been settled. The present discussion had, however, dissipated all his hopes, for the opinions of the highest authorities in every respect disagreed. The increased powers which improved ordnance were everywhere exhibiting tended still more to unsettle the question, and the present discussion, although it might terminate without any decisive result, could not fail in the end to be be-

official. There seemed to be a general concurrence that iron was preferable to wood as a material for shipbuilding, both as to strength and durability, and he could promise, on the part of the Government, that the subject should receive the utmost attention.

REPORT ON CORNWALL AND DEVONSHIRE.

(FROM OUR TRURO CORRESPONDENT.)

Nov. 23.—I have generally remarked, in a good deal of knocking about the world, that nothing in the whole range of British industry is more striking to foreigners than Cornish mining. Its immense antiquity, the comparatively narrow space (in West Cornwall particularly) to which it is limited, its periodical decay and revival, and the endless resources it exhibits by continual new discoveries in mines and districts supposed to be exhausted, appeal to the imagination of those at a distance in a manner difficult for us on the spot to comprehend. Your "wonderful Cornwall" is a general expression; and certainly the ups and downs of the various districts in the county are often more like romance than real business facts. Of late years—since the capital for working Cornish mines has been, to a great extent, drawn from beyond the county—the ups and downs of districts have been even more violent than formerly, one or two, fashionable for the moment, being almost the exclusive receptacles for public investments, at least in new mines. Indeed, the word "fashionable," as applied to such districts, is the most expressive we could use; for in their rise, in their decline, and in their feverish existence, the whole partakes more of that unaccountable element of caprice which directs, and ever has directed, the unreasoning but irresistible power we call fashion—a power which, in many of its vagaries, the whole contemporary world has been unanimous in condemning, and yet, by some strange spell, has been powerless to resist. Fancy a few years ago trying to start a mine in what is now called the Chiverton district? It would have been considered the height of madness; and yet, on the strength of one good bunch of ore, which is not a novelty in the district—for a bunch of ore, probably as good, was worked in the adjoining mine—the whole neighbourhood is positively bristling with engine-stacks. I could, looking back for the last 20 years, give a dozen instances of similar rises, generally followed, unfortunately, by a short feverish existence, and an equally sudden decline.

Now, although I, in common with everyone who has the real interests of Cornish mining at heart, object to this periodical concentration of all attention on one or two districts, which is found practically invariably to come to grief—because the pace is too great to last—I think there can be no possible doubt that we want to see more capital directed to the development of virgin, or comparatively virgin, ground. I believe there are great tracts of comparatively untried ground in Cornwall, and even entirely new districts, which, when properly developed, will open out resources equal to any yet discovered in the county. Everyone who knows the ins and outs of Cornish mining is well aware that a large number of mines are put to work for other considerations than their intrinsic merits. Mines that require the immediate erection of a great plant of machinery, and involve a large consumption of fuel, naturally receive the preferential support of those influential and highly respectable firms interested in the manufacture of machinery and the importation of coal—the latter being generally considered the most securely profitable business in Cornwall. Now, the great mass of money lost in Cornish mining (that is, in the working of mines—I bar share transactions) during the last 20 years has been sunk in mines of this class—mines which require an outlay of from 50,000*l.* to 100,000*l.* to clear out the old workings and commence at their bottom (probably 150 fms. or 200 fms. deep) the search for new metalliferous deposits. Great Wheal Alfred, Tywarthaile, Great Wheal Busy, and, above all, the old mine of Great Wheal Vor, are only among a few of the most conspicuous instances of this class of failure; indeed, since the late Mr. John Taylor opened up with such magnificent results the old mines worked under the names of the Consolidated and the United Mines, no decided success has attended the re-working of any deep old mine in Cornwall, and the only experiment of the kind now being made in the county is at Crenver and Wheal Abraham. If even half the millions sunk in these old mines had been judiciously expended (as Cornishmen will know how to spend money when they have not some more powerful motive to spend it otherwise) on new ground, can anyone doubt that the result must have been the discovery of numerous Setons, South Caradons, and Wheal Metals? It cannot be doubted that such must have been, in a great measure, the result; and, therefore, the working of a lot of new mines is in itself what is most to be desired. The only misfortune is that it seems as if the public will only find the money for such concerns under the stimulus which creates a fashionable district, and which absurdly and unreasonably accumulates for the moment in one small region a dozen or so trials, where two, or at most three, would be sufficient, and thus starves other parts of the county. I suppose such a result is inevitable while public money flows into Cornish mining through its present channels, but certainly it is none the less to be lamented.

No more remarkable illustration of these facts is to be found than in the Wheal Vor district. I do not at the moment recollect the exact amount that was lost in the old mine, but I suppose it was at least 200,000*l.*; and it must be remembered that that sum was sunk and wasted in direct opposition to public opinion in Cornwall, which from the beginning was dead against the experiment. Suppose that money had been spent in efficient trials of the comparatively new ground of the district, can anyone question that several important discoveries besides Wheal Metal would long ere this have been made. At the present moment the splendid results of Wheal Metal scarcely recompense the shareholders in the Wheal Vor Company for their losses in the old mine; but how magnificent would have been their success if their energies had been originally directed, as they should have been, to the comparatively virgin mine of Wheal Metal. In the first place, they would have saved the loss of 200,000*l.*, which is now a dead weight standing against them in their capital account; in the second place, Wheal Metal would probably have been in the height of its prosperity when tin was 40*l.* per ton higher than it is at present. On the returns which the mine would have made under those conditions it is not too much to estimate that the difference would have been 25,000*l.* or 30,000*l.* a-year extra profit to the shareholders beyond what they can realise under present conditions and prices. Taking this at only 100,000*l.* extra on the value of the mine, and allowing for interest of money, the working of the virgin ground in their sett (instead of the old mine) from the beginning by the Wheal Vor Company would have made a difference to them of certainly not less than 400,000*l.*, and probably half a million. And this is what they would have been unanimously recommended to do by everyone in the county whose opinion was worth having, if they had taken the trouble to be properly advised. It must be quite understood that those at present engaged in the management of Wheal Vor are in no respect responsible for this disastrous mistake; on the contrary, the vigorous working of Wheal Metal, and the rescuing of the concern from being the most total disaster that ever occurred in Cornwall, is due entirely to the remarkable judgment and indomitable energy of Mr. Noakes. He saw the mistake that had been committed, and set himself to work, even at the eleventh hour, to remedy it, amidst a mass of difficulties almost unparalleled, and it is only due to him to state that at the time his efforts were generally looked upon as quixotic, for it was almost universally considered to be then too late to remedy the evil that had been done.

But Wheal Metal does not stand alone in this district as an instance of neglected, or rather delayed, opportunities. Considering what it has done, I have always looked upon the district as an unfairly neglected one, for certainly the new trials in it have been most feeble and faint-hearted, forming a remarkable contrast with the energy and determination which have proved so successful in the great districts of Camborne, Illogan, Redruth, and Gwennap. The Wheal Vor district occupies the killas basin between the granite of the Tregonning Hill and of the Carn Menelle range; but not more than a third of this basin has yet been fully explored. Notwithstanding the great success of the mines extending from the foot of the Tregonning Hill east to the valley forming the boundary of the parish of Breage, which is about the centre of the basin, no really vigorous trials have been made in the eastern half of this basin, extending from the valley to the other granite range, although the continuations of the lodes are traced under precisely analogous geological conditions. I myself can see no reason whatever why this eastern portion of the basin should not prove at least approximately as successful as the western portion; and a proper and vigorous working—such a working as Wheal Metal has received within the last four years—must, I think, bring about some such result. Just in the bottom of the valley I have mentioned as forming the boundary of the parish of Breage, the country is broken up by one of those great cross-courses which mark all important metalliferous districts; and at the mine now called Sithney Wheal Metal, but formerly Sithney Wheal Buller, there has been a remarkable want of judgment

shown within the last few years by persistently confining the operations of the mine to sinking in this obviously unproductive bar of ground.

It is a remarkable fact that a similar mistake was made at the Carn Brea Mines, in their former working, where operations were also confined to the mere sinking of a shaft, which, happening to go down in one of those poor bars of ground found in all great mining districts, led to the abandonment of the mine, although, as was proved afterwards, if the levels had been extended properly, one of the most magnificent mines ever discovered in Cornwall would have been met with. Four or five years ago Wheal Vor Company held a large interest in Sithney Metal, and when Mr. Noakes took the reins in the former concern he wished to work the latter by vigorously extending the levels east. This, however, did not happen to suit the other shareholders, who belonged to that class whose business it is to sell mines, and not to work them, and his counsel was overruled. On this he prudently retired, and the result was that the mine soon changed hands. Under the new proprietorship the policy of mere sinking, and hanging on to the skirts of Wheal Metal, was persevered in, and it is only recently that a sound policy of working has been adopted. That this sett, in due time, will bring results worthy of its name and neighbourhood I do not myself for one moment doubt.

But the most important virgin ground in the district is the large sett (formerly two setts) now working as EAST WHEAL VOR, comprising nearly the whole of the eastern half of the basin, and occupying precisely the same position, with regard to the granite hill bounding that side, as Great Wheal Vor does to the Tregonning granite. It includes all the lodes of Old Wheal Vor, as well as those of Wheal Metal, and the result of the sound and vigorous working it is now receiving is to be looked for with great interest. This sett has, no doubt, been scratched about and played with for a long time—treated, in fact, as Wheal Metal was until within the last four years—but it has never yet received such handling as could, except by an extraordinary accident, be expected to lead to any useful result. It now, however, seems to be provided not only with a good plant of materials, but with an ample paid-up capital; and certainly its chances at the present moment are infinitely better than those of Wheal Metal four years ago. If the analogous geological conditions under which the same lodes occur on both sides of the basin forming the Wheal Vor district should lead, as may certainly be fairly expected, to anything like analogous results, then, indeed, East Vor, containing, as it does, the eastern continuation of the best known productive lodes of the district, has a future before it not easily to be matched. It is to such mines as these—virgin ground well situated—that, in the best interest of Cornwall, the capital and energy of legitimate mining enterprise should be directed. The public cannot go very far wrong in them, for, although, of course, they cannot all succeed, yet a sufficient number to give a splendid result, on the whole, have never yet failed to do so. Investors have only one danger to avoid in such concerns, and that is not to pay too dear for them. As I have many times pointed out in these columns, the most promising, or even the richest, of mines may be bought too dearly.

REPORT FROM MONMOUTH AND SOUTH WALES.

Nov. 24.—The Iron Trade of the district remains in about the same state as reported last week, and there is a large business doing. Makers are fairly off for orders, but the tendency of the market is rather in favour of buyers within the past week or ten days. Tin-plates have not improved, and many of the charcoal makers are indifferently supplied with orders. Steam coal is in brisk demand, and the collieries are in regular employ; house qualities are also in fair demand. The preliminary arrangements have been concluded for an amalgamation of the Vale of Neath undertaking with the Great Western Railway Company. The terms agreed upon are payment of a dividend at the rate of 5*l.* per cent. per annum on the ordinary capital, and participation in the profits over and above the payment of that dividend. Some of the Vale of Neath shareholders are against the proposed union, and it appears that an energetic effort is to be made to defeat the amalgamation bill.

The Governor and Company of Copper Miners in England have given notice of their intention to apply for powers in the next session to alter and amend the stock and share capital of the company. It is proposed to cancel the ordinary stock, and in lieu thereof to create and issue new stock or shares to a smaller nominal amount, to rank *pari passu* with the preference shares, as affected or altered by the said Act; also to convert into shares or stock in the company, ranking *pari passu* with the preference shares, certain arrears of dividend now due and owing to the holders of preference shares.

The dispute between the Water Company at Merthyr and the ironmasters has at last been arranged by a compromise. The Water Company have agreed to let 105 cubic feet of water per minute flow over the gauge into the river, instead of 90 cubic feet, as directed by the original Act. These terms will, it is believed, prove satisfactory to all parties concerned.

The arrivals at Swansea include—The Venturosa, from Lisbon, with 136 tons of copper ore, for Richardson and Co.; the Prudent, from St. Malo, with 228 tons of zinc ore, for W. Rowlands; the Aeron Queen, from Fomona, with 160 tons of sulphur ore, for Barry; the Mallorée, from Almeida, with 123 tons of zinc ore, for Richardson and Co.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Nov. 24.—The Iron Trade is quiet. The improvement in feeling, spoken of last week, is hardly maintained, and the orders to hand are not by any means large. Buyers are discussing the question of a reduction in the prices of iron at the Preliminary Meeting, next month, but the makers of iron do not admit that such a step is in any degree probable. The rate of wages is now so much higher in proportion to the price of iron than it has long been, that any downward movement in prices would be difficult, even if a reduction in proportion to it were made in wages. Pig-iron is selling a shade better, but there is no improvement in prices; mine hot-blast pigs may be quoted at from 3*l.* 10*s.* to 3*l.* 15*s.*, the latter price being only obtainable for a few very choice brands; cinder pigs are sold at from 2*l.* 17*s.* 6*d.* to 3*l.*, and are not in brisk demand. The Hard-ware Trades are generally quiet, but not depressed, and employment for the workmen is good. The foreign trade keeps quiet, but there is a fair home demand.

This week there have been quite a series of sad fatalities in the mines of South Staffordshire. Reference was made last week to the dreadful accident at the Comberfield Colliery, near Dudley, by which eight men lost their lives from the breaking of a chain. The inquest on the deceased has been adjourned. The chain itself was all right. It has been tested, and found to bear a strain of upwards of 19 tons. Mr. Baker, the Government Inspector, has examined the place, and has pointed out what was clearly the cause of the accident. The frame which supports the pulley had sunk on one side, owing to a stratum of coal beneath being on fire. This was known, and measures had some weeks before been taken to restore it to its proper position. At the time of the accident, however, the pulley over which the chain was drawn was considerably out of the perpendicular, and the chain in consequence, in the course of the revolution, caught on one of the bosses which are placed on each side the pulley to prevent the chain slipping off. After turning round for some distance the engineman saw that something was wrong, and stopped the engine, the chain slackened, and fell on the square iron shaft on which the pulley turns. The edges of this are sharp, and cut and severed the chain. The adjourned inquest will, no doubt, show who was responsible for the frame being out of the perpendicular.

The neglect to take proper precautions in timbering was illustrated by a fatal accident, which occurred at Lord Dudley's Deepfields Colliery, on the 18th inst., in the thick coal workings, and by which John Richards, a boy, 14 years of age, lost his life. There were six pikemen at work in a stall, and the roof fell from a slip, killing the boy, but that part of the roof over the heads of the men remained firm, or their lives would also have been lost. The men were cutting the coal in a most reckless manner. The Chartermaster said that his instructions were to leave at least one "spurn" between each man's "stent," which would have given five props, instead of which there were only two. Mr. Baker, the Inspector, as on many other occasions, strongly urged the necessity of more careful timbering in working mines.—In another case Christopher Gay was killed, on Wednesday, at the Bowman's Harbour Colliery, in an ironstone pit. It is stated that the deceased was bringing a "van" along the gateway, which struck a timber prop, caused it to fall, and let the roof down upon him. The mode of timbering was of a very improper character.—On Monday William Price, a sinker, working for Mr. Brewer, at Eyecroft, was killed by the collapse of a new shaft, which was being sunk through the sand. Preparations were being made for supporting the sides of the shaft, and the deceased was twice brought up from appearances of danger. He was warned against descending again, but insisted there was no danger; the sides falling in, he was buried, and his body could not be recovered for some hours.—At a pit belonging to the Blaxwick Colliery a boy was drowned in the sump on the same day. It was fenced, and it is supposed he had got over the fence to look up the shaft.—At Messrs. Roberts and Yardley's Colliery, Variation, on the same day, an engineman, named William Bates, was found dead in the crank pit of a pumping-engine. The case is a mysterious one. The pit was fenced, and there were indications by the presence of an oil-can that the deceased had gone there to oil the bearings. It was thought he might have been sitting on the rails, and fell, and was struck dead by the crank. When he was found the engine was standing.

A man, named George Leatham, died on the 23d inst. from his leg having been broken

by a fall in an ironstone pit at the New Cross Colliery, near Willenhall, on Nov. 10. This makes 13 deaths from mining accidents in South Staffordshire within a week.

A very wise and benevolent project for the formation of a Colliery Accidents Relief Association, in North Staffordshire, has failed, through the indisposition of all but a few of the colliery owners of the district to give it their support. As will be remembered, upwards of 600*l.* was received from the surplus of the Hartley Fund, and Mr. Smith Child promised to add 500*l.* to this if the coalowners of the district would contribute 1200*l.*, by which the trustees of the fund which would thus be formed would be enabled to invest a sum of 2300*l.*, the interest from which, it was calculated, would be sufficient to meet the demands for relief arising out of coal pit accidents in North Staffordshire. The committee of the proposed association have expected themselves to the utmost to accomplish this very desirable object, but the majority of the coalmasters show such apathy that the committee have at last been obliged to yield to the necessity of abandoning a project which at one time looked hopeful, and which, if carried out, would have been a permanent and never-failing source of relief to those who may by accident, while at work in coal pits, be deprived of the means of earning their own livelihood. This course was decided upon at a meeting of the committee, at Stoke-on-Trent, on Monday afternoon.

BIRMINGHAM, Nov. 24.—The reduction of the Bank rate of discount to 7 per cent., announced here by telegraph to-day, has been hailed with much satisfaction, and cannot fail to give increased facilities for the establishment and conducting of local enterprises. The Iron Trade of this district exhibits but little signs of animation. Generally speaking, the middle of the quarter is almost necessarily a lifeless time; for whilst, on the one hand, the orders given out at the last ironmasters' meeting are nearly spent, it is yet too early to interpret the tone of the next meeting. Consequently, buyers are reluctant to purchase largely, in the hope, however groundless, of a further reduction. In the winter quarter, too, another reason tends to make the iron trade, in common with most others, inanimate. It is the not unreasonable desire manifested by buyers to order for immediate requirements only, in view of the annual stock-taking. Upon enquiry from some of the leading ironmasters this week we learn that the stocks of manufactured iron are lighter than usual at this season. The remark, however, does not extend to pig-iron, of which it is believed a large quantity has been warehoused for some time past. Now that money is becoming cheaper, and the strike of the colliers is very near over, a reaction must take place in pig, and the stocks be lessened accordingly. The local share market has been somewhat flat during the week. To-day's quotations are as follows:—Birmingham Financial, 13*l.* to 14*l.* prem.; Staffordshire Financial, par to 14*l.* prem.; Patent Shaft and Axletree Company, 5 to 5*l.* prem.; Munia's Metal Company, 14*l.* to 15*l.* dis.; British and Foreign Railway Plant, 14*l.* to 15*l.* prem.; Metropolitan Wagon, 12*l.* prem. An adjourned meeting for the last examination and discharge of Messrs. Barker and Son, metal merchants, has been held at the Birmingham Bankruptcy Court. The failure was mainly attributed to large speculations in Scotch pig-iron, amounting, in little more than 12 months, to the enormous sum of 300,000*l.* At the conclusion of the arguments of the learned counsel on both sides, the judgment of the Court was reserved. A presentation of an unusually interesting character has just been made to Mr. Richard Smith, who has for a long series of years held the office of mine agent to the Earl of Dudley. Having retired from active duty, the officials connected with the establishment resolved to offer for his acceptance a handsome silver vase. The event was celebrated by a dinner given at Dudley. We believe no action has yet been taken in reference to the formation of a joint-stock undertaking, announced sometime since by the Birmingham Financial Company, under the title of the Huddersford Colliery Company (Limited). The colliery is at present being worked by the firm of Francis Figgott and Co.; it adjoins the celebrated coal field of Cannock Chase, and contains an area of 87 acres. In reference to the Miners' Strike, a letter has been published from the district secretary of the Miners' Association, thanking the public for contributions toward the support of the men who are still resisting the attempted reduction of sixpence per diem in their wages. It is intimated that delegate meetings are shortly to be held in some of the chief towns of the district to consider the best means of supporting the hands on strike. Much interest is felt by the coalowners of South Staffordshire, in regard to the new coal-cutting machine just introduced by Messrs. Lock and Warrington, of Kippax. The results of the trial of this novel invention—which is worked by water-pressure at 150 lbs. per inch—are considered satisfactory.

REPORT FROM DERBYSHIRE, YORKSHIRE, AND LANCASHIRE.

Nov. 24.—There is a continued quietness in the Iron Trade. The time is fast approaching for manufacturers to take stocks of manufactured iron, and there is a general disposition amongst merchants to purchase only for immediate requirements. The pig-iron market is very quiet, and prices are unaltered. The rates for second-class iron are rather giving way, and needy makers do not hesitate to accept a reduction in prices. In the Cleveland district we hear of a brisk trade, and the export of manufactured pig-iron to France, Germany, and other states is improving. The demand for steel is still good, and in some of the manufacturing departments of the trade there is a greater demand than supply. For the colonies there is a steady enquiry for all descriptions of goods. The Bessemer steel, so much adapted for railway purposes, is in great request. In some of the districts the railways are unable to carry the quantity of goods which are manufactured. It was reported sometime ago that the furnaces of Messrs. Beale and Co., of Newbold, would be put out of blast altogether, and the plant removed, owing to the termination of the lease; but we hear that Mr. Plevins, of Dunstan Collieries, has entered into partnership with Messrs. Beale and Co., and that the furnaces will be put in blast again in a few weeks. At present they are under repair, and a new office is being built. The Coal Trade is exceedingly healthy, and there is a prospect of a brisk demand throughout the winter. Mr. Brown, of Chesterfield, and a partner in the Atlas Works, at Sheffield, has purchased a large acreage of coal in the Dronfield Valley. The new line of railway which is about to be made from Chesterfield to Sheffield passes through it, and, no doubt, being near Sheffield there will be a good demand for the coal from that neighbourhood. The surveys of the new line are in a forward state of progress, and in the course of a couple of years it will be opened.

A company is projected for the purpose of working the extensive collieries at Whitwood and Methley, near Normanton, Yorkshire, now carried on by the firm of "Henry Briggs, Son, and Co." It is originated by that firm with the primary view of securing the co-operation of all those connected with the collieries, either as managers and workpeople, or as customers, in the earnest hope of thus effecting a satisfactory solution of the difficult problem now so largely occupying the attention of political economists and philanthropists—namely, the best mode of associating capital and labour, and of preventing the occurrence of those trade disputes which so frequently disturb the social relations of our country. The collieries comprise about 2600 acres, and are now in full operation, producing from 5000 to 6000 tons of coal weekly. The members of the existing firm will retain in their own hands two-thirds of the share capital, and in allotting the remaining one-third, a decided preference will be given to applications for shares,—first, from the officials and operatives employed in the business; and, secondly, from the purchasers of the produce of the collieries. Surplus shares will be allotted among general applicants. The advantages anticipated are:—1. The attainment of a direct incentive to every worker, whether a shareholder or not, not only to do his own duty, but to see that his fellow-workmen do not neglect theirs.—2. The prevention of causes of dispute between the employers and employed.—3. The attaining of direct advantage to the operatives as well as the shareholders, from the adoption of improved modes of working, either by machinery or otherwise.—4. The securing of a permanently settled and superior class of workmen. The attainment of these advantages is especially desirable in coal mining operations; nearly 70 per cent. of the current expenditure being absorbed in wages for work which, from its nature, must necessarily be under imperfect supervision.

The result of the Ordnance Select Committee's experiments with chilled iron shot must be very satisfactory to the Derbyshire ironmasters, Major Palliser having chosen Derbyshire hot-blast iron to make his improved shot for competing with steel. A round, chilled, Derbyshire hot-blast iron shot, weighing 103 lbs., was fired from the Somerset gun with a charge of 25 lbs. of powder, against the Lord Warden target, a spherical steel shot weighing 116 lbs., with the same charge of powder being tested against it. Notwithstanding the difference of weight the effects of the two shots were very nearly the same, both shots went completely through the 4*l.* in. iron-plates of the target as well as through 8 in. of timber backing, bulging up the second inner iron skin of the target. On the score of economy the chilled iron shot has many very considerable advantages as compared with steel—the material from which the steel shot is made costing 50*l.* per ton, whilst that for the chilled iron shot can be had for 5*l.* per ton.

I was glad to see, by last week's Journal, that at the Miners' Conference a resolution was unanimously passed in favour of the use of coal-getting machines, the resolution asserting that, in view of the fearful sacrifice of life in collieries, for the sake of humanity the sooner the machines are put in operation the better. The miners, they state, would then have an opportunity of devoting their valuable strength and lives to a much more healthy and safer employment. The miners evidently take a sensible view of the introduction of machinery into this most laborious and dangerous occupation.

A fatal colliery explosion took place at the Fence Colliery, near Rotherham, on Tuesday, on Tuesday morning, by an explosion of gas. It resulted in the death of one man and the severe injury of three others. Owing to the good ventilation in the mine, the lives of the rest of the men and boys (40) were saved, as they got into such parts of the mine in which the current of air was good.

The applications for Letters Patent include—Mr. J. Gankroger, of Hadden Bridge, and Mr. A. Gankroger, of Hawkslough, near Hadden Bridge, for improvements in looms for weaving; Mr. J. Griffiths, of Litchurch, near Derby, manager of ironworks, for improvements in machinery or apparatus to be used in the manufacture of iron and steel.

MONSTER ROPE.—Messrs. Crawhall, of Newcastle-on-Tyne, have just finished a hempen rope of gigantic proportions, it being the largest ever manufactured in this district. The rope is constructed for a Liverpool railway incline, and measures 2216 fms., or upwards of 2½ miles long, and weighs nearly 18 tons. It is what is called

a three-strand rope, each strand having 100 threads, and it will have a continual strain pressure of 3000 tons.

UTILISATION OF BLAST-FURNACE SLAGS.

There is, perhaps, nothing that would prove a greater boon to the iron manufacturers of this country than the discovery of a really practical and economic mode of utilising the slags of blast-furnaces, by converting them into articles of a readily marketable character, instead of permitting them to remain, as at present, a positive encumbrance. That almost innumerable attempts have from time to time been made to effect this conversion must be well known to the readers of the *Mining Journal*, and most persons will remember the interest which attached to the very beautiful specimens of artificial marbles manufactured from blast-furnace cinders by Dr. Smith, from Philadelphia; but hitherto comparatively little has been done to apply the inventions and suggestions upon the regular working scale. For some time past, however, the attention of Mr. G. Parry, of the Ebbw Vale Ironworks, has been turned in this direction, and he has now patented an invention, from which the most successful results are anticipated. In preparing blast-furnace cinder for use, it has been usual to reduce the slag or cinder from the blocks (in which form it solidifies) to powder by means of stampers or mills, which process is very expensive, by reason of the power consumed in the operation. To effect an economy in the reduction of the slag or cinder, he proposes to apply below the chute or gutter, along which it runs from the furnace, jets of steam or superheated steam, or jets of air or water might be employed. The jets should take the form of a thin sheet, and be directed so as to strike into the descending stream of fluid cinder. The fluid cinder thus acted upon will be driven forward by the mechanical force of the jet, and be thereby caused to assume the form of threads as it cools in falling through the air, which threads by intermingling present an appearance not unlike coarse wool. By thus ensuring a very fine division of the cinder, he is enabled to reduce it to powder, by subjecting it to agitation in a barrel in contact with shot, or by any other ordinary crushing appliance requiring little power for working the same, or by simply ramming down the blown slag in the act of packing it in casks or trucks for transport it will be sufficiently reduced for the purposes of manuring. The powdered slag or cinder may be used in the manufacture of bricks, artificial stone, or cements, or employed with advantage as a mineral manure, it having been found to contain soluble silicates of potash, lime, and magnesia, with alumina, oxide of iron, manganese, and sulphur. He also proposes to utilise old cinder or slag by remelting it, and treating it in the manner above described. He prefers to use ordinary steam for effecting the mechanical disintegration or breaking up of the slag, as it may be readily obtained from the blast-engine boilers, and finds a pressure of from 10 to 12 lbs. per square inch sufficient for the purpose. The pressure may, however, be regulated by a cock. The form of jet most convenient resembles that well known as the "bat-wing" burner used in gas burning, the slit being about 1-16th of an inch wide, by 2 to 3 inches long, the same varying slightly, according to the quantity of slag flowing from the blast-furnace. The size of jet and pressure required to produce the best effect with any given furnace will be ascertained by the furnace manager. The steam may be conveyed to the descending stream of slag through an arrangement of ordinary gas-pipes, with joints and elbows turning so that the orifice shall come a couple of inches behind the stream of slag. The steam may be allowed to escape from a slit cut in the pipe itself, or a row of small jets of a circular or oval form may be used, the object of the invention being, as above indicated, to reduce the slag while in a fluid state by the mechanical action of an impelled current striking into the descending current.

When the jets and the pressure are properly regulated, the blown slag will be in a great part reduced to a fibrous state, resembling coarse wool, and it will, therefore, be liable to be carried away by any passing current of air. To prevent this, and more especially when jets of air are used to effect the reduction of the slag, it becomes necessary to form a chamber in the front of the blast-furnace to receive the fibrous material. This chamber should be of taper form, and may from time to time be emptied by a crane or rake, as is commonly done in discharging coke ovens, or in any other convenient manner. The less reduced particles of the blown slag assume the form of shot, but less shot and more fibre is formed when the jets are properly regulated, which may soon be found by a little practice. When the reduced slag is intended for use as a manure for top dressings, it is evident it must be brought to a powder, but otherwise the blown slag may be dug or ploughed into the ground with little preparation. Mr. Parry's claim is for the disintegrating or breaking up of blast-furnace slag or cinder, by subjecting it while in a fluid state to jets of steam, air, or water.

MANUAL OF CHEMICAL ANALYSIS.—The immense importance to the chemical student of a thoroughly reliable text-book is universally acknowledged, yet hitherto almost every manual issued has been open to some very grave objection; either its accuracy has been doubtful, or some novel and questionable theory has pervaded it, or the work has been too complicated for an elementary work and too incomplete for anything else. We have now before us an admirable and compendious treatise by Dr. Noad, F.R.S., whose position as lecturer on chemistry at St. George's Hospital is alone a sufficient guarantee for the character of the work. The subject is ably and systematically treated, whilst the language is such that the student will have no difficulty whatever in comprehending it. After a few general remarks, the various operations necessary in making a qualitative analysis—solution, precipitation, filtration, &c.—are described, and the relative merits of the several kinds of laboratory furnaces and apparatus explained. A chapter on reagents is next given, which will prepare the student for the consideration of the composition of the principal metallic oxides with reagents, which occupies the succeeding chapter. By this means Dr. Noad is enabled to give almost as much information as the mining student is likely to require in less than 150 pages; and the composition of the principal inorganic and organic acids with reagents, the composition of the principal poisonous alkaloids, and a chapter on systematic qualitative analysis being then given, it will be obvious that by the careful study of the volume the difficulty of ascertaining the nature of the ingredients contained in a given compound may be easily overcome. But it is not always sufficient to know that a certain metal or other substance is contained—the practical man usually considers it of the utmost importance to know the quantity as well as the quality of the ingredients. This Dr. Noad readily enables him to ascertain, the eighth chapter containing all requisite information as to the estimation of inorganic substances and their separation from each other; and organic substances, mineral waters, soils, and ashes are subsequently treated of. It will thus be seen that the book will be of equal value to the medical and to the non-medical student. By way of appendix, several sets of elaborate tables are given, to facilitate the use of French measures and weights, and supply the student with various other calculations, which he would otherwise have to make for himself. The table for the calculation of analyses extends over six pages, and gives evidence of the employment of a vast amount of labour; its contents sufficient to enable the student to ascertain with comparative little trouble the quantity of an element that may be required contained in any substance likely to be found by analysis. The importance of the table is that it enables a calculation to be made with the use of multiplication and addition only, instead of with multiplication, addition, and division, which would otherwise be indispensable. In order to make the advantage of the table apparent, we subjoin the solution of Dr. Noad's problem—How much sulphur is contained in 15.75 grains of sulphate of baryta?—as made with and without the improved table:—

WITH THE IMPROVED TABLE.	WITHOUT THE IMPROVED TABLE.
10 grains = 1.378400	10 = 685
5 grains = 0.689200	5 = 342.5
7 grains = 0.961380	7 = 380.5
0.5 grains = 0.068675	0.5 = 34.25
Total 1.888425	220 ÷ 116.5 = 1.88842

It will thus be seen that the calculations agree to four places of decimals, which is ample for all practical purposes. Of the general accuracy of the book, indeed, no fault need be found, the few errors comprising only such clerical errors as even the least attentive student could readily correct for himself. The work is one which will doubtless be extensively patronised, and one that is likely to pass through many editions as a standard manual for students.

GEOLOGICAL MAGAZINE.—The original articles in the November number of this periodical are—"On Involutions Liasicae," by Mr. H. B. Brady; "Description of some New Palaeozoic Crustacea," by Mr. H. Woodward; and "On the Laurentian Formation," by Dr. Bigsby. There are translations of Leake's *Baculite Beds of North-Western Bohemia*, and Marcon's *Geological Researches in Nebraska*. The reviews, reports, and proceedings of societies, notices of recent discoveries, and miscellaneous information, are quite as interesting as usual.

URR'S DICTIONARY OF CHEMISTRY.—The twenty-first part of the Chemical Dictionary, founded upon that of the late Dr. Urr, and edited by Mr. Watts, has been issued. The article now reached is that on "Lipic Acid," so that no doubt need longer exist that the work will be completed in the thirty-three parts, as promised. The article on "Light," contributed by Prof. Roscoe, and contained in this and the preceding number, is one of the most interesting in the Dictionary, and is really an elaborate treatise on the subject, displaying an enormous amount of research, as well as judgment in the arrangement. It may be mentioned that under the head of "Chemical Action of Light," the professor has included an admirable little sketch of the history of photography.

MANUFACTURE OF COMPRESSED FUEL.—An invention, which consists in an improved dryer required for drying the coals before mixing the pitch as used in making compressed fuel, has been provisionally specified by Mr. John Grantham, of King's Arms-yard. The dryer is formed by one or more large cylinders placed horizontally, and surrounded by a brick fire, and heated by a furnace from beneath. These cylinders by simple mechanical means are made to revolve slowly, exposing the whole surface alternately to the fire. Inside of these cylinders and attached to them are made spiral or inclined flanges, and at the ends are suitable boxes, into which the cylinders are fitted, so as to allow them to revolve while the boxes are stationary. Into one of these boxes the coal to be dried is placed, and it is then passed through the cylinders, being moved forward by the spiral flanges till it reaches the box at the other end, from which it is drawn off when dry to be taken to the mixers. The second part of the invention consists of what is called a traveller, or elevator, placed

under the boxes, from which the dry coal is drawn; it is formed of a hollow trough, in which is a shaft and a screw, which being made to revolve convey the dry coal towards the mixer. At this point it may be necessary to add another elevator, to raise the coal into a chamber over the mixers, where the pitch or other material to be mixed with it is applied, thus saving labour, and preventing the dust which rises from the dry coal on its removal by the present system from the dryers to the mixers. The traveller, or elevator, may be formed by an endless band, having buckets, and by other well-known mechanical contrivances.

VANCOUVER COAL MINING AND LAND COMPANY.—The half-yearly general meeting of shareholders will be held on Tuesday next, when the report of the directors, of which the subjoined is an abstract, will be submitted.—The manager reports continued progress of the colliery works and increasing settlements on the property of the company. The output of coal during six months, to June, 1864, was nearly double that for the corresponding period of the previous year. The competition of the Sydney (Australian) coal and the Hellingham Bay (American duty free) coal at San Francisco has necessitated a reduction there in the price for Nanaimo coal. At Nanaimo prices are unchanged, and, with the increased machinery, the manager hopes to compensate for the decline in price at San Francisco by an increased output. The character of the company's coal is now becoming well known. The gold discovery on the Sooke River will, it is expected, induce the long-looked-for immigration of the labouring population from California; but it has not caused any of the company's miners to leave. From the Victoria market being overstocked with similar goods to those sent out by the company, a large portion of the goods still remain on hand, and Messrs. Wallace and Nichol have been instructed to take the first opportunity to dispose of the stock and close the store forthwith. In May last, 100 lots of land were sold by public auction for \$6077, which, with \$351 for other sales of town lots to employees, will be carried to the credit of the land mortgage account. Although many of the lots were bought by the workmen and other residents at Nanaimo, there were some Victorian purchasers; this is considered to justify the anticipation that the estate, independent of the coal seams, will eventually realise the whole of the purchase-money. Mr. Nicol has been given leave of absence during the winter, the inclemency of the last having seriously affected his health. Capt. Nicol, his brother, takes the management during the interval without remuneration. Nanaimo is now a port of entry. The harbour is carefully buoyed, and available at all tides, and a commodious wharf is nearly completed. The accounts to June 30 showed a credit balance, exclusive of land sales, of \$1857, 13s. 6d., the profit on the six months' working being \$1267, 11s. 5d. A further sum has been expended during the past six months in improvements of property, additions to wharves, plant, and machinery. The rails and chairs shipped and the two iron barges to be shipped during the month will be paid for out of the additional capital subscribed in May last. Another locomotive and forty additional wagons are required, for which the ironwork will be sent out. The sum of \$501 has been granted for the schools at Nanaimo, and the grant to the Bishop of Columbia of the church, parsonage, and school site has been, on certain conditions, confirmed. The directors congratulate the shareholders upon the present position of the property.

THE IRON OF LAKE SUPERIOR.—The discovery of vast deposits of iron ore near Goulais Bay, on the Canadian side of Lake Superior, is a matter of no ordinary importance. For some time it has been known that iron existed on Canadian territory, near Fort William, but the extent of the beds has not been made known by exploration, and their situation is not peculiarly favourable for working. The discovery of large quantities of ore at the eastern end of Lake Superior, not far from Sault, within five miles of a good harbour, is a source of an entirely different colour. We look upon every fresh discovery of mineral wealth upon the northern shores of Lakes Huron and Superior as of an immense importance in reference to the question of north-western extension. It is useless to deny that the territory on these shores is not only peculiarly fitted to maintain an agricultural population. It does contain much good land capable of supporting a considerable number of persons, and its timber is in many places valuable. But its climate is ungenial, and its soil is neither so fertile nor so easily worked as the prairie of the West, with which it competes for settlement. It is plain, then, if it is to be rapidly settled, it must be by means of the mines. Copper, lead, and nickel exist in abundance, and no contemptible indications of silver have been found. Iron has been added to the list, an article which is likely to attract a larger population than any of the others, so vast is the quantity consumed.

MINING IN ITALY.—Under the title of the National Mining Company of Lombardy, an influential Italian company has been formed for working the property at Bellio, in the provinces of Como and Bergamo, reported upon by Mr. Geo. Darlington to a meeting of the promoters of the Mining Company of Italy (an account of which appeared in the *Journal* of Sept. 12, 1863), only some few hundreds of the shares remaining unsubscribed. The report in question was of a very elaborate nature, but owing to the great elevation at which the minerals were situated English capital could not be obtained, and the company became defunct. The consequence is that the Italians have determined upon working the mines themselves, being convinced that there are in Lombardy mines of silver and copper ore of great richness. A society, under the title of the National Society of Mines in Lombardy, has been formed at Lecco and Milan by some of the most distinguished citizens of both places, and this society is prosecuting mining operations with great success, having in its possession some mines both of argentiferous galena and copper ore, of a very high percentage of metal in the ore. The aim of this National Society is to bring to light and put in regular course of working such mines as may be considered as unquestionably good in the judgment of even the most rigorous critics, and afterwards to offer them for sale, &c., or work them in conjunction with foreign capitalists.

MINING IN SOUTH AUSTRALIA.—Upwards of 150 persons, consisting of miners and their families, have this week left Cornwall to work on the extensive copper mines in South Australia. The whole of the party received free or assisted passages under the Government system of emigration to Adelaide.

NORTHUMBERLAND AND DURHAM MINERS' PERMANENT RELIEF FUND.—On Saturday night last a public meeting was held in the school-room, Usworth Colliery, for the purpose of establishing a branch society of the above fund. Mr. L. B. Coxon, chief viewer, presided. In his remarks he stated that he had watched this society from its infancy until the present time, and he could say that it was really a living fact. Mr. Henry Taylor addressed the meeting at considerable length upon the moral bearings of the fund. His address elicited much applause. Mr. John Richardson, of Newcastle, showed the benefits conferred upon working men by such a society. Mr. Alexander Blyth, the secretary of the fund, made a few practical remarks, pointing out that such a society was much required at Usworth Colliery, for the death rate was there higher than in any in the county. At the close a branch society was formed, and nearly the whole of the audience became members. The colliery band was in attendance, and performed several popular airs. Votes of thanks to all parties concerned brought the meeting to a close.—*Newcastle Daily Chronicle*.

ENGLISH, IRISH, AND FOREIGN ROLLING-STOCK COMPANY.—The directors have made a first call of 11. per share on the shares of this company. We are informed that the directors have made very satisfactory arrangements for the purchase of Spring Hill Works, Birmingham, and will commence operations on Jan. 1.

PRICES OF MATERIALS.

As charged at EAST MARGARET MINE during the following months of 1864:—	May.	June.	July.
Borer cast-steel	Per cwt. —	—	— 45s. 0d.
White lead	—	—	— 24 0
Leather	—	—	— 1 8
Longsoud timber	per foot	6s. 9d.	— 0 8
Yellow pine timber	—	—	— 1 4
Coal	per ton	12 6	12s. 0d. 12 6
Best candles, free of cartage	5 cwt.	3 6	3 6
Tallow, ditto	per cwt.	45 9	— 45 9
Rape oil, ditto	per gallon	—	— 4 6
Powder, ditto	per 100 lbs.	46 0	— 0 5
Safety fuse, ditto	per coil	0 5	— 0 5
Rope, ditto	per cwt.	48 0	— 48 0
Hemp, ditto	per lb.	0 6	— 0 6
White yarn, ditto	—	0 5½	— 0 5½
Hills, ditto	per doz.	—	— 1 9

GAMBLING IN SHARES.—The Court of Chancery will not assist a plaintiff seeking to have a contract set aside on the ground of fraud, if the contract be in its nature one of gambling or wagering. In the case of *Ross v. Fernie*, the plaintiff, a director of the British Exchange Banking Corporation (Limited), having only thirty shares in the company, in the course of a fortnight entered into contracts for the sale of between 700 and 800 shares, to be delivered on a future day, and was unable to deliver them in consequence of the shares being under the control of the persons to whom he had agreed to sell. Vice-Chancellor Wood refused to assist him in an interlocutory application, though the fraud was not denied by the defendants, this being, his Honour said, the case of a director gambling in shares, and seeking relief because he had been misled by the acts of fellow-speculators into making a wager higher than he ought to have done.

HOLLOWAY'S OINTMENT AND PILLS—UNPARALLELED POPULARITY.—The wonderful cures effected by these unequalled remedies in all parts of the world have won for them their present favour. Both pills and ointment are composed of ingredients which purify at the same time that they strengthen. No one can deny that health depends upon pure blood and the natural action of the animal organs. Both objects are effected without risk or danger by Holloway's medicaments, which are as innocent as they are potent. Internal disorders and external blemishes succumb to their power. These remedies, so applicable for the relief of the commonest complaints, are no less adequate to deal safely with the most formidable and dangerous disease which can afflict mankind.

MINE PLANT AND MACHINERY.—WANTED, a WATER WHEEL, 34 ft. diameter, 5 ft. 6 in. breast, with 16 heads of stamps attached; 50 fms. 2 in. rods, 40 fms. 8 in. main sweep rod, pulleys, travelling bob and shaft, and balance-bob, together with 20 fms. of 12 in. drawing lift, all complete. If second-hand all must be in good condition and perfect working order.—State lowest price to "T. S. M.," 22, Nassau-street, Dublin.—November 24, 1864.

TO IRONMASTERS AND OTHERS.—A PRACTICAL CHEMIST, of great experience in the chemistry of iron, would be happy to MEET with an ENGAGEMENT in an IRONWORKS, where his knowledge would be of advantage.—Address, "V. 29," *Manchester Guardian*, Manchester.

FOR SALE, the MINING JOURNAL, complete and equal to new, from end of August, 1855, up to 1st January, 1864.—Address, "L." Post-office, Upton-on-Severn.

MR. BRENTON SYMONS INSPECTS AND REPORTS ON ANY MINERAL PROPERTY. In all cases where procurable a plan will accompany his report.—18, Hatton-garden, E.C.

MESSRS. ROBERTS AND CO., 87, LONDON WALL, E.C. have selected a LIST of DIVIDEND and PROGRESSIVE MINES, which they can strongly recommend. Also, Bank, Railway, and other shares. Commission, 1½ per cent. Office of ROBERTS and Co.'s "Price List, and Stock and Share Reporter," price 3d.

MESSRS. ROBERTS AND CO.'S PRICE LIST AND STOCK AND SHARE REPORTER contains Reports of Mines, Notices of Meetings, Plans of Mining Districts (showing the position of progressive mines in reference to those returning large profits), Railway Meetings, Joint-Stock Companies Intelligence and Advice as to the Purchase and Sale of Stock.—87, London-wall, E.C.

A PRACTICAL MINING AND MECHANICAL ENGINEER, of 25 years' experience at home and foreign, and who speaks Spanish and Italian fluently, is DESIROUS of an ENGAGEMENT, at home or abroad; or would UNDERTAKE THE SURVEY AND INSPECTION of ANY MINING PROPERTY in any part of the world.—Address, "B.," *MINING JOURNAL* office, 26, Fleet-street, London, E.C.

WANTED, an EXPERIENCED TIN SMELTER and ASSAYER.—Apply, stating terms, &c., and if willing to go abroad, to "A. B. E.," *MINING JOURNAL* office, 26, Fleet-street, London, E.C.

SULPHATE OF BARYTES.—WANTED, a REGULAR SUPPLY, of fine colour, and well ground.—Send sample and price to Mr. Geo. DARLINGTON, Wrexham.

TO ENGINEERING SURVEYORS AND LAND AGENTS, &c.—WANTED.—The ADVERTISER, with good certificates from an engineering school, and brought up as a colliery and land surveyor, is DESIROUS of an ENGAGEMENT as JUNIOR ASSISTANT or otherwise. Is a good draughtsman. Unexceptionable references.—Address, "Beta," No. 64, Gower-street, Bedford-square, London.

TO CAPITALISTS.—The LESSEE of a FIRST-RATE COLLIERY in NORTH WALES WANTS a PARTNER, with about £2000. A mining engineer or practical colliery manager might have the management. A profit of 4s. per ton can be clearly shown on the coal raised in the royalty, which is an extensive one.—Address, "Bryn," care of Mr. H. Greenwood, advertising agent, Liverpool.

TO INVENTORS AND PATENTEEES.—A GENTLEMAN having an extensive connection with manufacturers, merchants, and others, would be GLAD to UNDERTAKE the SALE of INVENTIONS or PATENTED ARTICLES, on commission.—Apply to Mr. RAWLE, patent office, 14, Clare-street, Bristol. N.B.—Continental and foreign agencies solicited.

TO COLLIERY PROPRIETORS.—TO BE SOLD, BY PRIVATE CONTRACT, ONE 25 in. cylinder CONDENSING BEAM ENGINE, 3 ft. stroke, with fly-wheel 14 ft. diameter, jack head and feed pump 6 ft. diameter, winding drum for flat rope, 2 pump cranks for 2 ft. stroke, with TWO wrought-iron CYLINDRICAL BOILERS 24 ft. long, 6 ft. diameter, with steam pipes and fittings; the above in good order, and suitable for pumping and winding. Also, ONE DIRECT ACTING PUMPING ENGINE, 45 in. cylinder, 9 ft. stroke, with metallic piston, double beat valves and connections; ONE wrought-iron CYLINDRICAL BOILER, 29 ft. long, 6 ft. diameter, in excellent working order.—To view and treat for the same, apply to Mr. HALLS, Broncoed Colliery, Mold, Flintshire.

GLAMORGANSHIRE. THE LOWER RESOLVEN COLLIERY FOR SALE.—The LOWER RESOLVEN COLLIERY, situated in the VALE OF NEATH, GLAMORGANSHIRE, is FOR SALE, BY PRIVATE TREATY. It is open by drift, and is on the Vale of Neath Railway, with broad and narrow gauge communication. Area, about 600 acres. For terms and particulars, apply to T. M. SMITH, Esq., 1, Chapel-place, Duke-street, Westminster; or to Mr. CHAS. HENRY JAMES, mineral surveyor, 35, Thomas-street, Westthry Tydvil.

ON SALE, a SET of PUMPING MACHINERY, recently in use, consisting of a three-throw crank, slide rods, pendulums, bell cranks, and 180 yards (in three lifts) of 10 to 11 in. pumps, with rams, &c., complete.—Apply to the BREDBURY COAL COMPANY, Bredbury Colliery, near Stockport.

FOR SALE, the RIGHT to the PATENT of a VALUABLE IMPROVEMENT IN VALVES and BUCKETS for PUMPS, and in VALVES or COCKS for OTHER USES.—For particulars, apply to Mr. W. T. RAWLE, patent and mining agent, 39, Budge-street, Bristol.

WIRE ROPES FOR SALE, BY PRIVATE CONTRACT.—ONE WIRE ROPE, 196 fms. long; EIGHT ditto, each 183 fms. long; and TWO ditto, each 116 fms. long; all 4½ in. circumference, weighing 22 lbs. per fm., and made of the best charcoal iron wire, by Messrs. Glass, Elliott, and Co.—Applications to be addressed Messrs. COCHRAN, Grieve, and Co., Clifton Suspension Bridge Works, Bristol, where every information can be obtained.

HORIZONTAL ENGINES FOR SALE, at very low prices:—One 12 in. cylinder, 24 in. stroke; one 12 in. cylinder, 36 in. stroke; and two 14 in. cylinders, 24 in. stroke. All ready for delivery, and may be had with or without fly-wheels.—Apply to Messrs. E. PAON and Co., Laurence Pountney-place, Laurence Pountney-hill Cannon-street E.C.

ALLEN and QUENANGEN MINING COMPANY (LIMITED).—Notice is hereby given, that the ANNUAL GENERAL MEETING of the shareholders will be HELD at the offices of the company, No. 2, New Broad-street, on WEDNESDAY, the 30th day of November last, at Two o'clock precisely, for the purpose of receiving a report from the directors, and statement of accounts to 31st March last. By order of the Board, EDWARD J. COLE, Sec. 2, New Broad-street, London, E.C., November 18, 1864.

BEARIZ TIN STREAMING COMPANY (LIMITED).—Notice is hereby given, that a SPECIAL GENERAL MEETING of the Beariz Tin Streaming Company (Limited) will be HELD at the office of the company, on TUESDAY, the 6th day of December next, at Two o'clock p.m., for the purpose of confirming the resolutions passed at the special general meeting of the company, held on the 15th inst. By order of the Directors, ALEX. STRACHAN, Sec. No. 17A, Sise-lane, Bucklersbury, London, November 28, 1864.

EAST WHEEL VOR COMPANY.—At a MEETING of the committee, on Nov. 11, 1864, the following resolutions were passed:—In consequence of the death of Mr. W. J. Dunsford, application be made to his representatives for all books, leases, papers, &c.; that Mr. WILLIAM WATSON be appointed the pursuer of the mine; and that when the books, leases, papers, &c., are obtained the same be handed over to him.—Nov. 18, 1864. WILLIAM WATSON, Purser, Calstock, Cornwall.

WHEEL GRYLLS COMPANY.—At a MEETING of the committee, on Nov. 11, 1864, the following resolutions were passed:—In consequence of the death of Mr. W. J. Dunsford, application be made to his representatives for all books, leases, papers, &c.; that when the books, &c., are obtained the committee hand the same over to the pursuer. WILLIAM WATSON, Purser, Calstock, Cornwall. Nov. 18, 1864.

GREAT WHEEL GRYLLS COMPANY.—At a MEETING of the committee, on Nov. 11, 1864, the following resolutions were passed:—In consequence of the death of Mr. W. J. Dunsford, application be made to his representatives for all books, leases, papers, &c.; that when the books, &c., are obtained the committee hand the same over to the pursuer. WILLIAM WATSON, Purser, Calstock, Cornwall. Nov. 18, 1864.

WHEEL ARTHUR COMPANY.—At a MEETING of the committee, on Nov. 11, 1864, the following resolutions were passed:—In consequence of the death of Mr. W. J. Dunsford, application be made to his representatives for all books, leases, papers, &c.; that when the books, &c., are obtained the committee hand the same over to the pursuer. WILLIAM WATSON, Purser, Calstock, Cornwall. Nov. 18, 1864.

CHEMICAL TECHNOLOGY, By RICHARDSON and WATTS. Containing Sulphuric Acid, Salt, Chlorine, Soda, Potash, Grease, &c., their Manufacture and Applications. Vol. I., Part III., 800 pages, 8vo., with 400 woodcuts, £1 13s. Vol. II., Part IV., containing Aluminium, Sodium, Soda, Potash, Artificial Soda, Phosphorus, Lucifer Matches, Hypophosphite of Soda, Borax, Mineral Waters, Saltpetre, Nitric Acid, Gunpowder, Gun-Cotton, Fireworks, their Manufacture and Applications. 8vo., 600 pages, with woodcuts, £1 1s.

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OTTO'S MANUAL OF THE DETECTION OF POISONS BY MEDICO-CHEMICAL ANALYSIS. 12mo., 7s. H. Baillière, Publisher, Regent-street, London.

On December 3 will appear, price 1s. 6d.,

THE MINING AND SMLTING MAGAZINE, No. 26, for December, which contains:—Lead Smelting on the Mendip Hills, illustrated by six working drawings of the furnaces, and containing full particulars of the cost of erecting the furnaces, and of the smelting of the debris; a Contemporary Rock Formation, or Slag Conglomerate, in Greece; Results of the Working of Bache's Furnace for Smelting Iron and Lead, containing matter of great interest; Metallic Mines Commission; Galibier's Respiratory Apparatus; Manufacture of Aluminium; the Slag of Blast Furnaces; Cooling Puddling Furnaces; Special Review of the Copper Ore Sales for the month; Diagram, showing Fluctuations of the Scotch Pig-Iron Market; Bibliography, giving a *precis* of every noticeable work or memoir appearing in any language on mining, metallurgy, and chemical manufactures; Patents relating to Mining and Metallurgy, English, Colonial, and Foreign, together with a complete local Review of Mining, Quarrying, and Metallurgy for the month; Metal Market; Reports from every portion of the Continent, America, and the East; Prices Current of Metals; Metallic Ore Markets; Tabular Abstract of Mining Accounts; Mining, Stock, and Share Markets, English and American; full Statistics of every parcel of Metallic Ore sold during the month. London: Simpkin, Marshall, and Co., Stationers' Hall-court.

PRACTICAL MECHANICS' JOURNAL for December (Part 201, price 1s.), with a plate engraving of Mr. Wells's Ingot Mould, and thirty wood engravings. Original Articles on the Supply of Water to Cities, the Dutch System of Field Artillery, Decay in Wood Carvings, Ringed Structure in Ordnance, Jacquard Apparatus, New Surveying Instrument, Artillery Experiments at Portsmouth.—Recent Patents: Parrot, Steam Generators; Barber, Mowing Machines; Johnson, Sewing Machines. Reviews of New Books, Correspondence, Mechanics' Library, Scientific Societies, Monthly Notes, Marine Memoranda, Prices Current of Metals, Wood, &c., List of Patents, Registered Designs, &c.

London: Longmans, Paternoster-row; Editor's Office (Office for Patents), 47, Lincoln's Inn-fields, and 100, Buchanan-street, Glasgow.

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MANUFACTURERS OF PORTABLE AND FIXED STEAM ENGINES, MACHINERY FOR PUMPING, HOISTING, GRINDING, SAWING, &c., ENGINES FOR STEAM CULTIVATION, SELF-MOVING ENGINES FOR COMMON ROADS AND AGRICULTURAL PURPOSES GENERALLY.
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MANILLA ROPE OF SUPERIOR QUALITY, FIFTY PER CENT. STRONGER, AND THIRTY PER CENT. CHEAPER than Russian hemp rope.
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CREASE'S PNEUMATIC TUNNELLING ENGINE,
for SUPERSEDING the SLOW and EXPENSIVE USE of MANUAL LABOUR in SINKING SHAFTS, DRIVING LEVELS, TUNNELLING, &c., is guaranteed to drive through any rock of average hardness at a minimum rate of 1 fm. per diem, and to sink shafts at the rate of 2 fms. in three days.
Mr. CREASE will undertake contracts for sinking shafts, driving levels, &c., at an enormous reduction of time and great saving in cost.
Applications to be addressed (for the present) to the patentee, Mr. E. S. CREASE, Tavistock, Devon.

Prize Medal Awarded Great Exhibition, 1851, and International Exhibition, 1862.

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PATENT SAFETY BLASTING POWDER COMPANY (LIMITED).

MANUFACTORY.—SOUTH DOWN, NEAR DAVENPORT.

The company is PREPARED TO EXECUTE ORDERS for this POWDER to ANY EXTENT. The following recommendations of this valuable invention consist in—

1.—ITS SAFETY.
2.—THE SMALL AMOUNT OF SMOKE, and COMPARATIVE FREEDOM FROM NOXIOUS GASES AFTER DISCHARGE.
3.—ITS CHEAPNESS.

1.—The Patent Safety Blasting Powder being Non-Explosive, unless confined by tamping in a hole, none of the fearful and fatal accidents arising from all other kinds of powder employed for blasting can possibly attend its use, nor can explosion take place while the powder is deposited in store, or during transit, or in the operation of boring out the charge from holes which may misfire from defective fuses.

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3.—CHEAPNESS.—The Patent Safety Blasting Powder is cheaper and stronger than ordinary powder, the evidence of those who have adopted its use proving that a SAVING is thereby EFFECTED of from TWENTY-FIVE to THIRTY PER CENT.

The company are also executing numerous orders, both for the home market and for foreign countries, of the Patent Safety Blasting Powder, made up into waterproof cartidges.

These are especially adapted for wet ground, for holes difficult to charge, and for all work where dispatch is of consequence.

Copies of testimonials, and any further information connected with the powder, may be obtained from Mr. JOE HUTCHINSON, agent for Northumberland, Cumberland, and Westmorland, 20, Sandhill, Newcastle-on-Tyne; Mr. CHARLES DAVEY, general agent, Davenport; or from the Secretary, at the manufactory.

Dated South Down, September 19, 1864.

THE UNITY PATENT SAFETY FUZE COMPANY
SCORRIER, CORNWALL, SOLICIT ORDERS for the DIFFERENT KINDS of SAFETY FUZE which they are PREPARED to SUPPLY, of SUPERIOR QUALITY, and of ANY LENGTH.

CHARLES DAVEY AND CO.,
SAFETY FUZE MANUFACTURERS,
ST. HELEN'S JUNCTION, LANCASHIRE.

NEW COMBINED TURBINE, WINDING, AND PUMPING MACHINERY.

MANUFACTURED BY GEORGE LOW,

MILLGATE IRONWORKS, NEWARK-UPON-TRENT.

Who respectfully begs to bring the above to the notice of the mining public, as an extremely cheap and easy method of applying water-power for the above purposes.

The TURBINE, WINDING, and PUMPING MACHINERY are all fixed complete to one strong cast-iron bed plate, which can be placed in any situation without pit or excavation, and any height not exceeding 33 ft. from bottom of fall, the supply and suction pipe being all that is required to be connected to it, and can be brought in any direction. This combined machine can be easily removed when necessary.

6. Low begs also to state that the TURBINE is the most efficient and the cheapest method of applying water-power for mining purposes.

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IMPROVED TURBINE WATER WHEELS CONSTRUCTED EITHER TO WORK VERTICALLY OR HORIZONTALLY, and upon the MOST SCIENTIFIC and EFFECTIVE PRINCIPLE.

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J. U. BASTIER begs to call the attention of proprietors of mines, engineers, architects, miners, and the public in general, to his new pump, the cheapest and most efficient ever introduced to public notice. The principle of this new pump is simple and effective, and its action is so arranged that accidental breakage is impossible. It occupies less space than any other kind of pump in use, does not interfere with the working of the shafts, and utilizes lightness with a degree of durability almost imperishable. By means of this hydraulic machine water can be raised economically from wells of any depth; it can be worked either by steam-engine or any other motive power, by quick or slow motion. The following statement presents some of the results obtained by this hydraulic machine, as daily demonstrated by use:—

1.—It utilizes from 90 to 92 per cent. of motive power.

2.—Its price and expense of installation is 75 per cent. less than the usual pumps employed for mining purposes.

3.—It occupies a very small space.

4.—It raises water from any depth with the same facility and economy.

5.—It raises with the water, and without the slightest injury to the apparatus, sand, mud, wood, stone, and every object of a smaller diameter than its tube.

6.—It is easily removed, and requires no cleaning or attention.

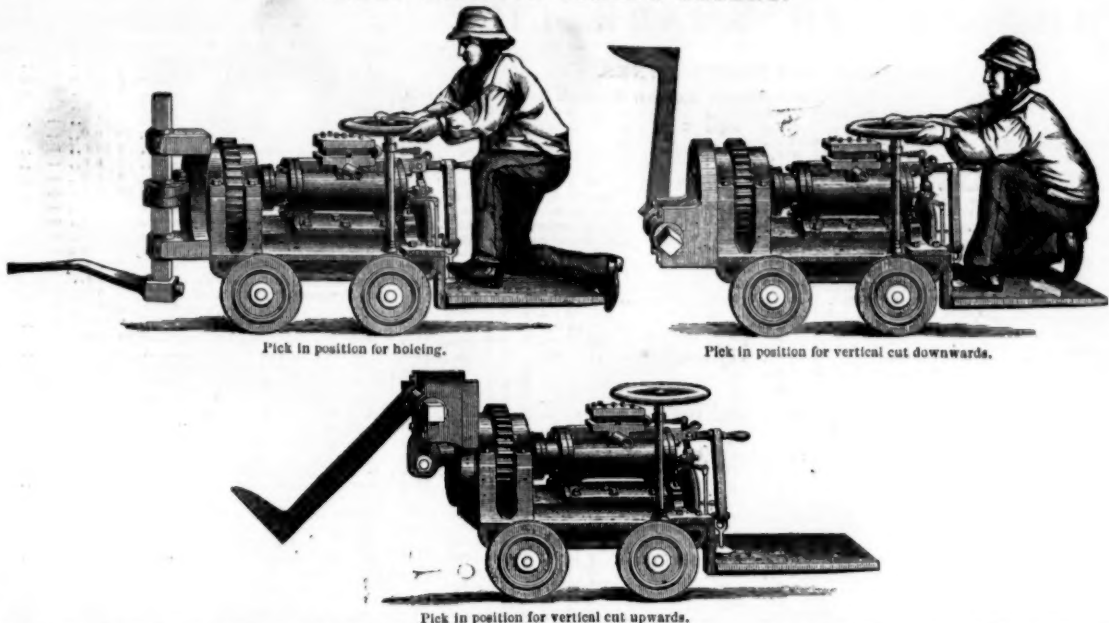
BASTIER'S PATENT CHAIN-PUMP may be seen daily in operation at Messrs. NATHAN BERGER and Co.'s Patent Rice Starch Works, Bromley-by-Bow, London, E. Cards of admission to be had on application to the inventor and patentee, Mr. J. U. BASTIER, C.E., 12, Gower-street North, London.

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OFFICES, 12, GOWER STREET NORTH, LONDON.
London, March 21, 1869. Hours from Ten till Four. J. U. BASTIER C.E.

COAL CUTTING MACHINERY.

JAMES GRAFTON JONES'S PATENT.



Pick in position for hoeing.

Pick in position for vertical cut downwards.

Pick in position for vertical cut upwards.

Messrs. JONES and LEVICK, proprietors of this patent, are prepared to supply these Machines, which are on an improved principle, and are constructed to work the coal at any angle from the horizontal to the vertical, thus rendering them capable of "hoeing" at any angle, and of driving "headings." They are simple and substantial in construction, and are not likely to get out of order. They are already successfully employed in the Barnsley coal district, and are being introduced into the South Wales and other coal mining districts. They are also suitable for mining the argillaceous ironstones of the coal measures, as well as working other mines and quarries.

N.B.—Air Compressing Machinery will be supplied, or plans and specifications furnished.

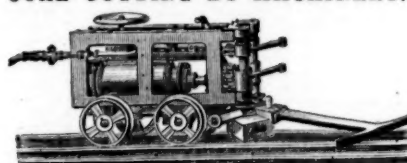
Applications to be made to Messrs. FREDERICK LEVICK and Co., 4, Charlotte-row, Mansion House, London; or Messrs. LEVICK and SIMPSON, Blairston Ironworks, near Newport, Monmouthshire.

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The WEST ARDSLEY COMPANY having, by recently patented improvements, perfected their coal cutting machinery, worked by compressed air, are NOW READY to MAKE CONTRACTS for the CONSTRUCTION and USE of their MACHINES. The results of twelve months' experience in the working of these machines, by the West Ardsley Company, have proved most satisfactory, their use being found to CHEAPEN the COST and IMPROVE the average SIZE of the COAL, to LIGHTEN the LABOUR, and also to MODIFY the SANITARY CONDITION of the MINE. All communications to be made to Messrs. FIRTH, DONISTHORPE, and BOWEN, No. 8, Britannia-street, Leeds.

NOTICE.—The WEST ARDSLEY COMPANY, having reason to believe that their patents are being infringed upon, hereby give notice that they will TAKE LEGAL PROCEEDINGS AGAINST ALL PARTIES who may MAKE FOR SALE, or USE ANY MACHINERY in the construction of which any such INFRINGEMENT is MADE.

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The PATENT TUBULAR TUYERE possesses GREAT ADVANTAGES over the ORDINARY TUYERES, both for its DURABILITY and EASY WORKING. A current of cold water going direct to the nozzle prevents their destruction, however much they may be exposed to the fire.

We repair them at half the first cost, making them equal in size to new ones, all parties returning them carriage paid.

No. 1 tuyere, 16 in. long	28s. each.
No. 2 " 18 " "	32s. "
No. 3 " 20 " "	36s. "
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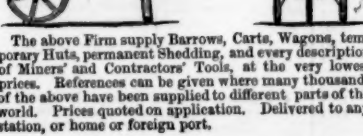
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Prize Medals—International Exhibition, Class 1 and 2.

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THE CRUCIBLES manufactured by the PATENT PLUMBAGO CRUCIBLE COMPANY are the ONLY KIND for which a MEDAL has been AWARDED, and are now used exclusively by the English, Australian, and Indian Mints; the French, Russian, and other Continental Mints; the Royal Arsenal of Woolwich, Bristol, and Toulon, &c.; and have been adopted by most of the large ENGINEERS, BRASSFOUNDERS, and REFINERS in this country and abroad. THE GREAT SUPERIORITY of these melting pots consists in their capability of melting on an average 40 pourings of the most difficult metals, and a still greater number of those of an ordinary character, some of them having actually reached the EXTRAORDINARY NUMBER of 96 meltings. They are unaffected by change of temperature, never crack, and become heated much more rapidly than any other crucibles. In consequence of their great durability, the saving of waste is also very considerable.

The company have recently introduced CRUCIBLES SPECIALLY ADAPTED for the following purposes, viz.:—MALLEABLE IRON MELTING, the average working of which has proved to be about seven days; STEEL MELTING, which are found to save nearly 1 1/2 ton of fuel to every ton of steel fused; and for ZINC MELTING, lasting much longer than the ordinary iron pots, and saving the great loss which arises from mixture with iron.

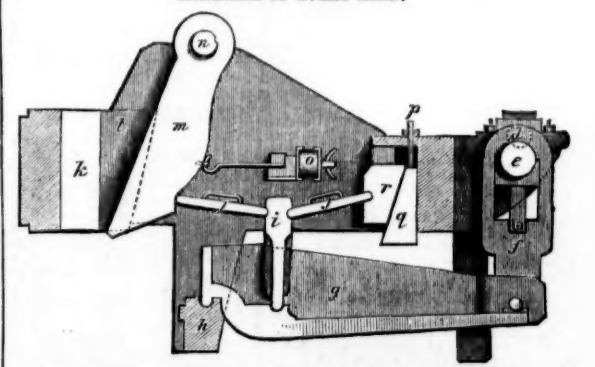
For lists, testimonials, &c., apply to the Patent Plumbago Crucible Company, Battersea Works, London, S.W.

Fully described in the MINING JOURNAL of July 5.

BLAKE'S PATENT STONE BREAKER,

OR ORE CRUSHING MACHINE.

FOR REDUCING TO SMALL FRAGMENTS ROCKS, ORES, AND MINERALS OF EVERY KIND.



It is rapidly making its way to all parts of the globe, being now in profitable use in California, Washoe, Lake Superior, Australia, Cuba, Chili, Brazil, and throughout the United States and England.

The above section illustrates Blake's Stone Breaker, just as made the last five years, and is fully protected in every part by patents.

Extract from Specification:—A short but powerful vibration is imparted to one or both of the jaws by any convenient arrangement, and combination of powerful levers, worked by a crank or eccentric on the main shaft.

LEGAL PROCEEDINGS will be taken at once against any person or persons found making, using, or vending any machine, the construction of which will constitute an infringement on the above patent. Read extracts of testimonials:—

Alkali Works, near Wigan.—I at first thought the outlay too much for so simple an article, but now think it money well spent. WILLIAM HUNT.

Welsh Gold Mining Company, Dolgelly.—The stone breaker does its work admirably, crushing the hardest stones and quartz. WM. DANIEL.

Our 15 by 7 in. machine has broken 4 tons of hard winstone in 20 minutes, for fine road metal, free from dust. Messrs. OUD and MADDISON, Stone and Lime Merchants, Darlington.

Kirkless Hall, near Wigan.—Each of my machines breaks from 100 to 120 tons of limestone or ore per day (10 hours), at a saving of 4d. per ton. JOHN LANCASTER.

Ovoca, Ireland.—My crusher does its work most satisfactorily. It will break 10 tons of the hardest copper ore at one hour. WM. G. ROBERTS.

General Frémont's Mines, California.—The 15 by 7 in. machine effects a saving of the labour of about 30 men, or \$75 per day. The high estimation in which we hold your invention is shown by the fact that Mr. Park has just ordered a third machine for this estate. SILAS WILLIAMS.

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DR. WATSON, F.R.S. (of the Lock Hospital, and College of Physicians and Surgeons) on the Self-Cure of Nervous and Physical Debility, Spermatorrhoea, Decline of Manly Vigour, and Diseases of Indiscretion, with Means for Perfect Restoration, free for six stamps, by Dr. WATSON, 1, South-crescent, Bedford-square, London. Consultation daily from Eleven till Two and Six till Eight. Sunday, Ten till Twelve.

THE MINING SHARE LIST

BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends Per Share.	Last paid.
1200	Alderley Edge (cop.), Cheshire [L.]	10 0 0	—	—	11 3 0	15 0 0 Oct. 1864
4000	Bedford United (cop.), Tavistock	2 0 0	2 2 1/2	—	11 11 0	2 0 0 Oct. 1864
1200	Boscawen (tin), Cornwall [S.E.]	15 0 0	—	—	1 5 0	0 0 0 May 1864
300	Botalack (tin), Cornwall [S.E.]	2 0 0	—	—	47 15 0	0 0 0 May 1864
5000	Bronthold (lead), Cardigan [S.E.]	2 0 0	—	—	9 10 0	0 0 0 Nov. 1864
916	Cargill (silver-lead), Newlyn	15 0 0	37 39	—	280 10 0	0 0 0 June 1864
1800	Carn Brea (copper), Cornwall [S.E.]	15 0 0	—	—	32 16 0	0 0 0 Oct. 1864
2900	Clifford Amalgamated (cop.), Gwyn	30 0 0	34 35	—	7 1/2 per cent.	Half-yrly.
12000	Copper Mines of England	25 0 0	—	—	1 per cent.	Half-yrly.
40000	Ditto	100 0 0	—	—	12 10 0	0 0 0 Oct. 1864
807	Orin Eddin (lead), Cardiganshire [L.]	7 10 0	—	—	271 10 0	4 0 0 Sept. 1864
1200	Derwent Mines (all-lead), Durham	300 0 0	—	—	122 0 0	0 0 0 Nov. 1864
1024	Devon Gt. Con. (cop.), Tavist. [S.E.]	1 0 0	600	—	943 0 0	10 0 0 Oct. 1864
888	Dolcoath (copper), Cornwall [S.E.]	128 17 6	—	—	775 10 0	0 0 0 Oct. 1864
12800	Drake Walls (tin), Cornwall [S.E.]	2 0 0	—	—	0 18 0	0 0 0 May 1864
614	East Basset (cop.), Redruth [S.E.]	29 10 0	89 1/2	—	125 0 0	0 0 0 Sept. 1864
1200	East Caradon (copper), St. Cleer [S.E.]	2 14 6	19 1/2	—	12 2 0	0 0 0 Oct. 1864
300	East Darnell (lead), Cardiganshire	32 0 0	—	—	101 10 0	0 0 0 Oct. 1864
1200	East Rosewarne (cop.), Pool, Illogan	2 0 0	—	—	369 10 0	0 0 0 June 1864
5000	East Rosewarne (cop.), Pool, Illogan	2 0 0	—	—	1 10 0	0 0 0 Oct. 1864
1900	East Wheal Lovell (tin), Wendron	2 13 6	15 1/2	—	64 0 0	0 0 0 June 1864
2000	Foxdale (lead) Isle of Man [L.]	25 0 0	—	—	1 14 0	0 0 0 Nov. 1864
8000	Frank Mills (lead), Christow	18 6 0	5 1/2	—	1 10 0	0 0 0 Nov. 1864
1200	Great Laxey (lead), Isle of Man [L.]	4 0 0	17 1/2	—	1 10 0	0 0 0 Nov. 1864
1798	Great Wheal Fortune (tin), Breage	18 0 0	7 1/2	—	4 12 0	0 0 0 Sept. 1864
5000	Great Wh. Vor (tin), Helston [S.E.]	40 0 0	34	—	29 15 0	0 0 0 Aug. 1864
119	Herdston (id.), near Liskeard [S.E.]	100 0 0	—	—	427 10 0	0 0 0 Oct. 1864
1024	Isaburne (lead), Cardiganshire, Wales	18 10 0	—	—	1 0 0	0 0 0 Oct. 1864
400	Isaburne (lead), Cardiganshire, Wales	18 10 0	—	—	2 16 0	0 0 0 Oct. 1864
2000	Mace-y-Safn (lead), [L.]	20 0 0	—	—	0 4 0	0 0 0 Nov. 1864
3000	Marka Valley (copper), Caradon	4 10 0	4 1/2	—	155 10 0	0 0 0 Aug. 1864
3000	Minera Boundary (lead), Wrexham	1 0 0	—	—	16 19 0	0 0 0 Jan. 1864
1800	Minera Mining Co. [L.] (id.), Wrexham	25 0 0	—	—	0 4 0	0 0 0 Nov. 1864
20000	Miner Co. of Ireland (cop., lead, coal)	7 0 0	37 1/2	—	0 11 0	0 0 0 Oct. 1864
40000	Mwynydd (iron ore), [L.] [S.E.]	2 10 0	—	—	0 13 0	0 0 0 Feb. 1864
950	Nanty Mines (lead), Montgomery	20 0 0	—	—	36 19 0	0 0 0 Mar. 1864
6000	New Birch Tor and Viller Cons. (tin)	1 0 0	2 1/2	—	122 10 0	0 0 0 Oct. 1864
5936	North Treaskerby (copper), St. Agnes	1 0 0	2 1/2	—	7 19 0	0 0 0 Nov. 1863
6400	Par Consols (cop.), St. Blazey [S.E.]	1 2 6	—	—	7 10 0	0 0 0 July 1864
200	Parry Mines (copper), Anglesey [L.]	60 0 0	—	—	0 10 0	0 0 0 June 1864
1773	Pelberron (tin), St. Agnes	15 0 0	—	—	0 10 0	0 0 0 Nov. 1863
512	Pelberron (tin), St. Agnes	8 0 0	—	—	0 10 0	0 0 0 July 1864
1123	Providence (tin), Ury Lelant [S.E.]	10 7 1/2	37 1/2	—	0 10 0	0 0 0 Aug. 1864
6000	Rosewell Hill (lead), [L.] [S.E.]	20 0 0	—	—	452 10 0	0 0 0 Sept. 1864
412	South Caradon (cop.), St. Cleer [S.E.]	1 5 0	550	—	74 10 0	0 0 0 May 1864
512	South Tolgus (cop.), Redruth, Cornwall [S.E.]	8 0 0	—	—	370 18 6	0 0 0 Nov. 1863
498	S. Wh. Frances (cop.), Illogan [S.E.]	18 10 0	25	—	0 5 0	0 0 0 Mar. 1864
6000	St. Day United (tin), Redruth	14 0 0	1 1/2	—	490 10 0	0 0 0 May 1864
800	St. Ives Consols (tin), St. Ives	8 0 0	—	—	15 11 0	0 0 0 Sept. 1864
2000	Tinctor (tin), Pool, Illogan [S.E.]	9 0 0	17	—	0 8 0	0 0 0 Nov. 1864
1600	Torrey Hematite Iron [L.] [S.E.]	6 7 6	—	—	0 2 6	0 0 0 Nov. 1864
4200	Vigra and Clagon (cop.), Illogan [S.E.]	1 10 0	—	—	2 3 6	0 0 0 Nov. 1864
6000	West Basset (copper), Illogan [S.E.]	1 10 0	—	—	25 18 0	0 0 0 Nov. 1864
3000	Wh. Chiverton (id.), Perranzabuloe [S.E.]	—	7	—	3 15 0	0 0 0 Nov. 1864
256	West Darnell (copper), Gwynnap	28 10 0	—	—	43 10 0	0 0 0 Nov. 1864
400	Wh. Wh. Seton (cop.), Camborne [S.E.]	47 10 0	210	—	417 0 0	0 0 0 Oct. 1864
512	Wheal Basset (copper), Illogan [S.E.]	5 2 6	92	—	603 0 0	0 0 0 Oct. 1864
1000	Wheal Basset and Grylls (tin)	7 0 0	—	—	3 0 0	0 0 0 Oct. 1864
512	Wheal Jane (silver-lead), Kew	3 10 0	13	—	15 0 0	0 0 0 Aug. 1864
1024	Wheal Laxey (lead), [L.] [S.E.]	4 0 0	—	—	10 2 6	0 0 0 July 1864
1024	Wh. Mary Ann (tin), Menaiot [S.E.]	8 0 0	—	—	58 17 6	0 0 0 Sept. 1864
100	Wh. Mary Ann (tin), Menaiot [S.E.]	8 0 0	—	—	288 5 0	0 0 0 Mar. 1864
80	Wh. Mary Ann (tin), Menaiot [S.E.]	8 0 0	—	—	243 5 0	0 0 0 May 1864
396	Wh. Mary Ann (tin), Menaiot [S.E.]	8 0 0	—	—	183 16 0	0 0 0 Oct. 1864
1040	Wh. Mary Ann (tin), Menaiot [S.E.]	8 0 0	—	—	80 5 0	0 0 0 Nov. 1864
2044	Wh. Mary Ann (tin), Menaiot [S.E.]	8 0 0	—	—	6 13 0	0 0 0 Nov. 1864
7060	Wicklow (copper), [L.] [S.E.]	2 10 0	18 1/2	—	15 17 0	0 0 0 Oct. 1864

* Dividends paid every two months. † Dividends paid every three months.

BRITISH MINES WITH DIVIDENDS IN ABEYANCE.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends Per Share.	Last paid.
3400	Rosecan (tin), St. Just	20 10 0	—	—	36 10 0	0 0 0 Mar. 1862
4000	Chiverton (lead), Perranzabuloe [S.E.]	6 0 0	—	—	85 0 0	0 0 0 June 1864
256	Condurow (cop.), Cornwall	76 10 0	—	—	7 0 0	0 0 0 July 1864
3450	Cook's Kitchen (copper), Illogan	12 0 0	12 1/2	—	0 0 0	0 0 0 Sept. 1862
1024	Copper Hill (tin), Redruth	12 0 0	—	—	7 12 0	0 0 0 July 1864
1024	Crookwood Moor (copper), St. Cleer	8 0 0	—	—	0 10 0	0 0 0 Feb. 1864
4076	Devon and Cornwall (cop.), Tavistock	6 6 2	—	—	0 17 6	0 0 0 Feb. 1864
8000	Dyffryn (lead), Wales	12 6 0	—	—	41 9 0	0 0 0 June 1860
940	Fowey Consols (copper), Tywardreath	4 0 0	—	—	7 18 6	0 0 0 Dec. 1861
6000	Great South Tolgus, Redruth	0 14 6	—	—	0 3 0	0 0 0 Mar. 1862
10240	Gunnislake (Chitlers' Adit)	0 0 0	—	—	1091 0 0	0 0 0 May 1864
160	Levant (copper), tin, St. Agnes	12 0 0	—	—	18 18 0	0 0 0 Mar. 1862
160	Mount Pleasant (lead), Mold	4 0 0	—	—	10 4 0	0 0 0 Mar. 1862
5000	Oreod (lead), Flintshire	0 0 0	—	—	0 5 0	0 0 0 Dec. 1862
5000	South Exmouth (lead), Christow	1 14 0	—	—	9 18 0	0 0 0 Jan. 1862
820	Spearhead Moor (tin), Cornwall, St. Just	12 19 0	—	—	7 0 0	0 0 0 Sept. 1860
572	Trevelyan Consols (tin), near Helston	14 0 0	—	—	11 0 0	0 0 0 Mar. 1862
1000	Trumpet Consols (tin), near Helston	11 10 0	—	—	8 15 0	0 0 0 Jan. 1861
12000	Twelve Apostles Adit (id.), Wrexham	1 0 0	—	—	14 10 0	0 0 0 Jan. 1861
1024	West Burton Gill (lead), Yorkdale	19 0 0	—	—	101 1 3	0 0 0 Oct. 1862
1024	West Caradon (cop.), Liskeard [S.E.]	7 0 0	—	—	295 10 0	0 0 0 Feb. 1861
1024	Wheal Friendship (copper), Devon	20 0 0	—	—	76 8 0	0 0 0 May 1863
896	Wheal Margaret (tin), Ury Lelant	10 17 6	9 1/2	—	0 19 0	0 0 0 May 1863
6400	West Fowey Consols (tin and copper)	7 10 0	—	—	0 19 0	0 0 0 May 1863

FOREIGN DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends Per Share.	Last paid.
20000	Australasian (cop.), S. Australia [S.E.]	7 7 6	—	—	0 10 0	0 0 0 Dec. 1863
2484	Burra Burra (cop.), S. Australia	8 0 0	68	—	320 0 0	0 0 0 Sept. 1864
6000	Central American (silver) [L.]	5 0 0	—	—	4 6 8	0 0 0 Oct. 1863
15000	Cape Copper Mining [L.] [S.E.]	7 0 0	11	—	0 15 0	0 0 0 Sept. 1864
12000	Cuba Copper Co. (cop.), Cuba [S.E.]	40 0 0	30	—	100 0 0	0 0 0 Aug. 1864
100000	Don Pedro No. Del Rey [L.] [S.E.]	12 0 0	—	—	0 9 0	0 0 0 Aug. 1864
70000	English and Australian [L.] [S.E.]	10 0 0	—	—	1 1/2 per cent.	Yearly.
15000	East Indian Coal, Calcutta [L.]	10 0 0	—	—	0 14 4	0 0 0 June 1864
25000	Fortuna (lead), Spain [L.] [S.E.]	3 0 0	3 4	—	21 10 0	0 0 0 June 1864
25000	Gen. Mining Assoc., Nova Scotia [S.E.]	30 0 0	25	—	0 12 0	0 0 0 June 1864
60000	Kapunda Mining Co., Australia [S.E.]	1 0 0	1 1/2	—	10 1 2	0 0 0 Aug. 1864
18000	Linares (id.), Pao Ancho, Spain [S.E.]	3 0 0	6 5 1/2	—	1 1 0	0 0 0 July 1864
10000	Lusitania (of Portugal) [S.E.]	3 0 0	—	—	0 10 0	0 0 0 Aug. 1864
9275	New Widdow (copper)	20 0 0	—	—	1 7 3	0 0 0 Jan. 1864
10000	Portuguese (all-lead), [L.] [S.E.]	20 0 0	—	—	0 12 6	0 0 0 July 1864
97500	Port Phillip (gold), Clunes [S.E.]	1 0 0	1 1/2	—	63 15 0	0 0 0 Jan. 1864
11000	St. John del Rey [L.] [S.E.]	15 0 0	35	—	2 19 0	0 0 0 May 1864
43174	Unit. Mexican (all), Mexico [S.E.]	28 8 0	5 1/2	—	0 10 0	0 0 0 May 1864
10000	Vancouver (coal), [L.] [S.E.]	1 0 0	—	—	0 13 0	0 0 0 June 1864
25000	Victoria (London) Mining Co. [L.]	1 0 0	—	—	0 5 0	0 0 0 Aug. 1863
20000	West Canada Mining Company [L.]	1 0 0	—	—	0 5 0	0 0 0 Aug. 1863
45000	Yudansutana (cop.), S. A. [L.] [S.E.]	3 0 0	2	—	0 5 0	0 0 0 Aug. 1863

FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends Per Share.	Last paid.
10000	Altan and Quanganen Uni. (cop.) [L.] [S.E.]	10 0 0	3	—	4 5 0	0 0 0 Nov. 1863
10000	Copago Mining Company, Chili [S.E.]	16 0 0	—	—	6 18 0	0 0 0 Nov. 1862
10000	Gt. Barrier Land, Min. & N. Ze. [L.] [S.E.]	0 0 0	—	—	15 per cent.	May 1863
108515	Mariquita and New Granada [S.E.]	1 0 0	—	—	0 9 6	0 0 0 July 1863

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call
35000	Alamillos (lead), Spain [L. £3] [S.E.]	1 0 0	1 1/2	1 1/2	Sept. 1864
100000	Anglo-Brazilian (gold) [L. £1] [S.E.]	0 5 0	—	1 1/2	Dec. 1863
20000	Bear Tin Streaming Company [L. £1] [S.E.]	0 17 6	—	—	Oct. 1863
25000	Capula (silver), Mexico [L. £1] [S.E.]	1 0 0	—	1 1/2	Feb. 1864
17000	Central Italian (copper) 7000 £ paid	0 0 0	—	—	Jan. 1859
10000	Copago Smelting [L. £1] [S.E.]	10 0 0	—	—	Fully paid.
75000	Dun Mountain (copper), New Zealand [L.] [S.E.]	1 0 0	—	—	Fully paid.
50000	East del Rey (gold), Brazil [L. £3] [S.E.]	1 10 0	—	—	Oct. 1864
8000	English and Canadian Mining Company [L.]	5 0 0	—	—	Fully paid.
40000	Fortune (copper), West Australia [L.]	2 0 0	—	—	Fully paid.
60000	Frontino and Bolivia (copper), New Granada [L. £3] [S.E.]	0 15 0	—	—	Oct. 1864
50000	Great Northern (copper), South Australia [L. £3] [S.E.]	1 10 0	—	—	June, 1862
24000	Hindostan (copper), Bengal [L. £3] [S.E.]	1 0 0	—	—	June, 1862
40000	Hop Silver-Lead and Copper Mining Co. [L.] [S.E.]	25 0 0	—	—	Fully paid.
10000	Karibits Colliery Company [L.]	1 0 0	—	—	Fully paid.
30000	Lagunaso (sulphur, copper), Portugal [L.]	1 0 0	—	—	Fully paid.
100000	Montes Auros (gold), Brazil [L.] [S.E.]	2 0 0	1 1/2	1 1/2	Fully paid.
50000	Nova Scotia (lead and gold) [L. £3] [S.E.]	1 0 0	—	—	Nov. 1862
10000	Orea (copper) New Zealand [L. £3] [S.E.]	0 15 0	—	—	Sept. 1864
15000	Pachusa Silver Mining Company, Mexico [L. £1]	1 0 0	—	—	June, 1863
80000	Panuelillo (copper) [L. £1] [S.E.]	1 0 0	—	—	Feb. 1864
4000	Peel River Land and Mineral (Limited)	100 0 0	—	—	Stock.
29000	Quebrada (copper), Venezuela [L. £10] [S.E.]	6 10 0	—	—	Sept. 1864
50000	Rosa Grande (gold), Brazil [L. £1] [S.E.]	0 5 0	—	—	April, 1864
10000	San Roque (lead), Spain	5 0 0	—	—	Fully paid.
60000	Santa Barbara (gold), Brazil [L. £1] [S.E.]	0 15 0	1 1/2	—	Sept. 1864
120000	Scottish Australian Mining Company [L. £1]	0 17 6	—	1 1/2	Feb. 1864
18000	South Europe Mining Company, Spain [L. £5]	3 0 0	—	—	May, 1860
13000	Teplitz Colliery Co., Bohemia [L. £5]	3 0 0	—	—	June, 1863
5000	Valdemard Mining Company [L. £20]	10 0 0	—	—	Oct. 1864
50000	Vallanassano (gold), Italy [L. £1] [S.E.]	0 10 0	1 1/2	1 1/2	Oct. 1864
4000	Victor Emmanuel (copper), Italy [L.]	0 0 0	—	—	Fully paid.
1000	Western Africa Malibou (copper) [L.]	10 0 0	—	—	Oct. 1862
12000	Wheat Ellen (copper), South Australia [L.]	5 0 0	—	—	Fully paid.
40000	Worthing (copper), South Australia [L.] [S.E.]	1 0 0	—	1 1/2	Fully paid.
75000	Yorke Peninsula, South Australia [L. £1]	1 0 0	—	—	Fully paid.